

MAY 13, 1865.

Original Correspondence.

MONA, AND ITS MINERAL RESOURCES.

SIR.—The ISLE OF MAN has of late been the favourite field for investment with those capitalists who prefer the uncertainty, the chances of enormous prizes but frequent blanks, which the development of mineral resources always afford. For some time past it has been the fashion for English people to explore every country but their own, of the beauty and characteristics of which they are almost entirely ignorant. If we believe the letters with which the daily papers teem, tourists are abroad exposed to much discomfort and extortion, and therefore to those who have that suffered I strongly recommend a visit to this island. The passage from Liverpool to Douglas, by the commodious Isle of Man steamboats, only occupies about five hours and a half. Douglas is a prosperous town, containing about 10,000 inhabitants; it is very irregularly built, the streets, both large and small, having apparently got into a tangle, but they contain some well-built houses and amply-stocked shops. The principal defect to this town is the want of proper drainage, which is a standing disgrace to the legal authorities, who appear to be as fond of red tape as the officials in our Government offices. One of the peculiarities of legislation here is, that no Bill can be passed in the House of Keys without a majority of 13; so that recently, in the case of an important measure, when only 20 members were present, 12 of whom supported and eight opposed, being one short of the requisite number, the motion fell to the ground. This town offers great advantages to visitors, there being plenty of commodious houses at moderate rentals; the necessities of life are remarkably cheap: there is good bathing, good fishing, and a fine harbour for yachts, which at high tide contains about 17 ft. of water; plenty of sailing and rowing boats, from the miniature barge, for elderly or timid parties, to the crank light skiff, suitable to those accustomed to the speedy outrigger; easy cars, with shrouds, civil carmen, for those who prefer driving; and picturesque walks, with magnificent views from the surrounding mountains, the ascent of which requires no mean pedestrian abilities. From Douglas to Laxey is about eight miles, over a very hilly but remarkably good road. Laxey is a rising village, principally inhabited by miners, and its importance will always be greatly influenced by the proportionate success of its neighbouring mines. The principal of these is the—

GREAT LAXEY LEAD AND COPPER MINE, whose recent extraordinary discoveries have been the means of inducing enterprising capitalists to start several mines in the district, in the hope of obtaining similar success. Some of these possess good chances, and bid fair to prove great prizes; while others are likely to be mere sinks for the capital of incautious speculators. Of course, in the prospectuses all of these sets contain the Great Laxey lode, the accommodating nature of which must be a source of great surprise to all visitors to this neighbourhood, and of intense gratitude to the promoters of the various companies. Great Laxey is situated in a picturesque glen, about half a mile from the village. The workings are of unusual extent, and are at present about 212 fms. deep. The returns of ore are immense, and I understand that the reserves are estimated at a quarter of a million. This mine gives employment to about 600 men, and its prosperity is, therefore, a matter of vital importance to Laxey. The machinery, which is almost entirely worked by water-power, is in itself well worth a visit, and is perhaps the finest in the world. There are six water-wheels, one of which, 73 ft. in diameter, is the principal object of interest to the casual visitor, and all are in a state of thorough efficiency. There are very extensive dressing-floors, where the ore is crushed, cleaned, and prepared for market; the machinery employed is very perfect, and the process highly interesting. The prosperous condition of this mine reflects the highest credit upon the management of Capt. Richard Rowe, and the company is fortunate in possessing the services of so skillful and energetic a manager. Such satisfactory results can only be obtained by means of considerable combined theoretical and practical experience. The miners appear to be a steady, industrious, temperate set of men, many, in fact, being total abstainers.

The principal mines in the neighbourhood of Great Laxey are Great North Laxey, Reindeer Laxey, East Laxey, and East Snafell. There are several other sets being tried, which have not yet been formed into public companies. Great North Laxey and Reindeer Laxey are provided with machinery, but upon the others there is none erected.

GREAT NORTH LAXEY is at the bottom of a glen, between two high mountains, so that when the levels are further extended they will be a very considerable depth from surface. The shaft is now sunk 70 fms. from surface. The appearance of the lode in the 50 and 60 fm. levels is very kindly, being about 4 ft. wide, containing two ribs of solid lead about 3 in. thick, and it improves in depth. I think that when they have sunk another 10 fms., and proved this lode in depth, it will be found very rich, and amply repay the shareholders for their outlay and perseverance. There is efficient machinery of ample power to prove the mine.

REINNIE LAXEY is in one of the prettiest glens in this island, and possesses unusually good chances for speedily becoming a very valuable property. The set is extensive, and literally a network of lodes; it is supposed to contain the principal Great Laxey lode, which is intersected by four large and several minor lodes. At a short distance from the shaft two strong promising lodes will meet, and form a junction with the main lode, a point which is regarded with the greatest interest by the agents of the mine. Good stones of ore have been taken from lodes running inland from the shore, which will intersect the main lode, and upon the strongest of these Captain Rowe intends driving towards the shaft. From its favourable position the principal points in this mine can be proved at small expense, and I think that the shares will before long command a very much higher market value.

In the neighbourhood of Douglas several sets are being tried, one at Great Onchan and two at Douglas Head, but at present they are only in their infancy. The most advanced is the—

BALDWIN LEAD MINE, which is about four miles from Douglas. A shaft has already been sunk 17 fms. upon a very promising lode, and another shaft is now being rapidly sunk to prove the main or east and west lode, where there are great chances of meeting with large deposits of ore. From Douglas to Foxdale is about seven miles, and over a very heavy road. The principal mines in this district are worked by the

ISLE OF MAN MINING COMPANY, whose set once comprised all the island but the Laxey district, and is now of very considerable extent, as may be imagined from the fact that six separate and distinct mines have been, or are now, working upon the course of the champion lode, from which immense quantities of very valuable ore have been, and are still being, raised. The name of these mines are Beckwith Mine, Cross's Mine, Dixon's Mine, Old Foxdale, Hodgson's Mine, and East Foxdale Mine. The water-power being insufficient to prosecute the deep workings of these mines, they have been compelled to have recourse to steam, and have erected at great expense some magnificent machinery. Owing to the courtesy of the manager, Captain J. L. Thomas, to whom I return my sincere thanks, for in this case I was unprovided with an inspecting order, I was enabled to go underground in the Old Foxdale Mine, and thoroughly examine the various workings. I was much pleased with the vigorous manner in which the mine is now being worked, and surprised at the enormous extent of reserves. If managers generally were to imitate Captain J. L. Thomas's example, and persist in accumulating proportionate reserves of ore, we should not have such frequent cases of mines being suddenly transferred from the dividend to the calling list. The ground in some parts of the mine is soft, and consequently very easy to work, but requiring a great deal of timber to make it safe; but in others it is very hard and difficult to work, which is, however, counterbalanced by the superior richness of the ore for silver. Cartage is a very heavy item in the expenses of these mines, the carriage to or from Douglas being £1. ton. Great credit is due to the manager and agents under him for the able manner in which all difficulties have been overcome, and a permanent dividend properly established. I may here remark that this company is under the direction of Messrs. John Taylor and Sons, of London, which is a sufficient guarantee that the mines will be worked in a fair, vigorous, and efficient manner. These mines give employment to about 500 men.

SOUTH FOXDALE MINE is about three miles from Castletown, which was formerly the seat of Government in this island, but whose glory has since departed to Douglas. It is a quiet, straggling town, and appears at this season of the year to be in a state of stagnation. The scenery is, however, delightful. South Foxdale possesses several important features, and there are many points which should be vigorously worked, either of which, if successful, would stamp this as a valuable property. Capt. Gross is evidently a clever practical miner, and has great faith in the mine ultimately proving very productive, but in my opinion the directors are not giving him a fair chance, and are risking a valuable property from want of a liberal but comparatively small outlay. The expedients used to reduce the monthly cost contrast very unfavourably with the liberal system at Foxdale, and I think that if the directors were to visit the mine they would be unanimously in favour of a more vigorous style of working. The number of men employed should be greatly increased, and the adits driven as speedily as possible to intersect the great east and west lode, a discovery at which point would greatly enhance the market value of the shares. The manager is very sanguine that in a few fathoms they will get a rich discovery in the shaft, which would materially lighten the cost. A nice parcel of ore was ready for market, and if the principal points are fairly tried I think that South Foxdale will soon become a dividend property.

UNION LEAD MINE is in the Foxdale district, upon the same lodes, and is a very promising speculation. An adit has been driven upwards of 150 fms. to prove the various lodes, upon the most promising of which a shaft is now being sunk. It is a very large set, extending for upwards of four miles upon the course of the principal Foxdale lode, which has already proved so productive to the Isle of Man Company.

FAULDER'S SIDE SLATE QUARRY, near Glen Rushen, is romantically situated on a steep mountain. The slate crops out at surface, and appears to improve in quality in depth. The works are vigorously prosecuted, and the quarry appears likely to prove valuable, although practical authorities are of opinion that slate quarries will never prove very remunerative in this island.

GLENMAY SILVER-LEAD MINING COMPANY is in a picturesque valley, or glen, within about three miles of the celebrated Foxdale Mines. The set contains several east and west lodes, which run parallel to the champion lode in Foxdale, on the main vein of the island. There are several caunter lodes, and the best authorities in this district are of opinion that when they are intersected by the main lodes immense deposits of ore will be discovered. At present the workings have been principally confined to the shallow levels, but it is the unanimous opinion of all practical men that the lodes will materially increase in productiveness at a greater depth. The ore raised is of a very promising character, and there are unusual facilities for dressing it and conveying it to the port of shipment. It is anticipated that the shares in this adventure will shortly command much higher prices. At present they are largely held by parties residing in Belfast, and the remainder by practical miners of great local experience, which is a healthy sign of the intrinsic worth of the undertaking. In a similar manner to the Great Laxey Mine, these workings can be prosecuted to any depth by water-power alone, which will enable all the ore to be raised at a trifling expense. The beauty and extent of the various views from the surrounding hills in this district will greatly interest the tourist.

There are several sets being tried between Peel and Ramsey, of which I hear flattering accounts; but while they have undoubtedly good chances of success, some time must elapse before they become profitable. I think, however, that in a few years some important discoveries will be made, and this part of the island become a favourite and profitable field for mining operations.

The Manx men have a strong predilection for fishing, which they prefer to mining or agricultural pursuits. They are generally a hard-working, temperate, and thrifty race. The Forbes Mackenzie Act is in operation throughout the island, and in consequence of the public-houses being closed at 11 o'clock on week-days, and from 10 o'clock on Saturday until 7 o'clock on Monday morning, there is but little display of drunkenness in the streets. This Act does not interfere with the comfort of the visitor, but is oppressive to the inhabitants. The clergy appear to be all powerful, and are very jealous of their prerogative; but I do not think that the spiritual condition of the people would be pre-

pared if they were to be more liberal, both in their principles and their labours. To all those who have not yet determined where to spend the summer vacation I strongly recommend a visit to the Isle of Man. The air is bracing, and the people civil and obliging, while the scale of charges at the principal hotel is about one-third less than at a second-rate hotel in the metropolis, and the accommodation unrivaled. The houses are principally built of stone, of which there is a plentiful supply; and this, combined with the stone hedges, presents at first a cold appearance to the stranger. Most of the hedges, however, are topped with gorse, which is now in full bloom, and produces a gorgious effect, while violets and primroses luxuriate in thousands. The island abounds in mineral, which principally appears in profitable quantities at a depth of 50 or 60 fms., so that in a few years I anticipate that the list of dividend mines will be strongly recruited from the various companies recently started. The mountainous character of the country affords unusual advantages for proving the various lodes discovered, at a trifling expense. There is generally a very liberal supply of water-power, labour is cheap, and, in fact, there are few fields which offer greater inducements to the capitalist for the development of mineral resources than the Isle of Man.

City, May 10.

DETECTION OF FIRE-DAMP IN COAL MINES.

SIR.—I was much surprised at some of Mr. Ansell's statements, in reply to "J. A. D.", and noticing in the same Journal that both Mr. Ansell's and Mr. Wilkinson's apparatus could be seen at the West London Working Classes' Industrial Exhibition, I took the first opportunity to examine the inventions, and they are certainly both extremely ingenious, and reflect the highest credit upon the gentlemen who have contrived them. Mr. Ansell's may suffer somewhat by being placed side by side with Mr. Wilkinson's; yet, if both be proved to act equally well, I do not see that there would be anything greatly to object to it; although I should judge that Mr. Ansell's arrangement would be perhaps rather more expensive than the other, unless he proposes some cheaper form than that shown. Again, if Mr. Ansell can construct, as he promises, an instrument which can be carried in the waistcoat-pocket, and will infallibly indicate the percentage of fire-damp present, it would give him an advantage which I should think the other invention could never aspire to.

But there are some points connected with Mr. Ansell's letter and with his invention which it is certainly desirable, with his longer experience of the matter, he should explain. In the first place he states that the barometer indicates the total height of the column of the atmosphere, consequently its actual weight, and the variations in that weight, but that it will not indicate the density of a particular atmosphere. Now, if Mr. Ansell will point to a case in which this has been proved, I will accept his assertion as accurate, but I think he has made the assertion in a moment of enthusiasm concerning his own invention, and will be glad of the opportunity to withdraw it. I believe that, fortunately for Mr. Ansell, his view is incorrect; had it not been so, his invention would have been altogether worthless in the several instruments wherein he uses mercury. The cause of the mercury indicating in Mr. Ansell's arrangement is precisely the same as in that of Mr. Elie de Beaumont; at least that is my opinion, and I shall endeavour to convince Mr. Ansell that it is a correct one.

Mr. Ansell makes the astounding assertion that "mine gas, or as it is usually called fire-damp, is lighter than air, bulk for bulk; but then it accumulates in the pit, and is bounded by a wall of the atmosphere—just as steam is bounded by the walls of a boiler—forming, practically, a part of the atmospheric column; hence, although lighter, it exerts the same pressure on a given surface." Now, as to the theoretical accuracy of this statement I can say nothing, but, practically, it is not true, as is proved by the well-known fact that in a mine gallery the fire-damp is not all driven to the end, but that we can often crawl through a fiery level with the mouth and nostrils near the ground, when the upper part of the level is so foul that it would be dangerous to raise the head. Perhaps Mr. Ansell will be kind enough to place a barometer in (say) a tall glass shade, open at the bottom, and (after noting the number of inches registered when the internal and external air are similar) carefully force fire in fire-damp or coal-gas (which, for the purpose of experiment, will answer the purpose equally well), so as to permit the atmosphere to form "a wall," and thus keep up the pressure. If he can displace the atmospheric air without changing the indication of the barometer, I will admit that I am answered, and that his invention is the most valuable that has ever been made; and I will further use my best endeavours to get it adopted, upon his answering only one other objection.

Upon bringing one of Mr. Ansell's balls from an ordinary atmosphere into an atmosphere charged with fire-damp, I find that it indicates with marvellous rapidity, and an infinitesimal quantity of the dangerous gas appears to give a good visible indication, which, by a very simple arrangement, can be made to give an audible signal. So far the discovery is admirable. But, unfortunately, there seems to be a defect which would deprive it of all its utility—I fear the indicator does not return to zero. If the foul gas be allowed to gradually purify, as it would do in a mine, the pointer stops before it reaches its normal position, whilst if the foul air be rapidly withdrawn the pointer is given an impetus which causes it to pass zero and stop on the wrong side. Now, although this may appear a defect that can be easily remedied, I fear it is fatal; for it seems to prove that the mixture of the gases is not a simple mechanical mixture, but a chemical combination, at least to some extent. If this be so, I think that Mr. Ansell will admit that after being for a few hours in the presence of fire-damp his apparatus will cease to indicate, and that the ball would have to be brought out of the mine to be re-filled with atmospheric air. These are little points which I am sure Mr. Ansell will be as glad to explain as I shall be to read the explanation; and they are, doubtless, points which must be answered if Mr. Ansell wishes that experienced men in the mines, as well as those out of them, shall be unable to point out any probable source of failure or trouble.—*May 8.*

E. D. H.

ON SLATE QUARRIES, AND SLATE COMPANIES.

SIR.—I have read with interest the discussion in recent pages of the Journal as to the cost of slate quarry management. There is much truth in the complaints against slate companies with costly staffs of well-paid officials, who have little or nothing to do. This is one branch of what may be termed systematic picking the pockets of such of the public who are tempted by the great profits made by really good quarries, honestly managed, to join worthless concerns, where they are merely fleeced and swindled.

But, as the shrewd Roman poet truly says, those who mistake the reverse of wrong for right are the reverse of wise. The cost of management must bear due proportion to the work done. Where skill and zealous industry are essential to secure the best returns from a large outlay, it is a fatal error to fancy there is any economy in dispensing with, or in not paying sufficiently, men every way well up to the work they undertake. All our best and shrewdest men of business, in every branch of manufacture, well know they cannot afford to lose in a hundred ways they can never know or prevent, for the want of honest and efficient management. Therefore, without over-paying those they employ, they never stint the outlay absolutely needful to secure the essential skill and character. And it is clear that in mining and quarrying, when the payments for wages and stores are large, constant supervision is needed, to prevent much loss from waste and peculation.

Therefore, many mines have suffered by giving their captains salaries so insufficient for men of ability, that it is a custom for one man to manage many concerns, often at some distance apart, one of which would have required his undivided care, to do full justice to the mine and adventurers. In business, as in engineering, it is a fatal mistake not properly to appportion the strength of materials—mental as well as bodily—to the work they have to perform. But this is no excuse for the shameful fraud of saddling insolvent quarries with heaps of officials, well paid for helping one another to do nothing.

Let me notice, in conclusion, the warning of "Caution" against worthless slate quarries—a warning much needed. But he is wrong in saying all the slate veins are secured and worked along their entire course, nor does he comprehend the real difference between bastard rock and slate. He also errs in supposing large quantities of unsaleable slate are made and stacked on the quarry floors or quays. There is yet room to open and put in work good quarries, on regular veins, if the ground be chosen by those who understand slate. Again, what may be termed the "swindling quarries" generally produce little or no slate. Nor is bastard rock by nature more perishable than slate. As I have shown in my pamphlet, the proportion of oxides in the metal is the cause of slates rotting, or perishing, by exposure to weather. In this respect bastard rock, properly so called, resembles slate in general appearance, but from want of lamination and grain cannot be worked: though even amongst bastard, out of much waste, something like a decent slate may perchance be picked here and there. Of course, a judge can never mistake between the good and worthless in a pile of slate, or a working face of rock. And even a novice may notice if slates are clean and sharp at the edges—well squared, thin, and straight—even in size, and not broken or shattered. When he sees such in sizes at and above 20 in. by 10 in. each, he may be pretty sure such slate can be sold in the present state of the market.

But it will require a man who knows something of slate to decide whether

the quarry can yield a sufficient quantity of such slate on terms which will return a profit on the outlay.

"A MAN OF EXPERIENCE."

HOW SOME SLATE QUARRIES ARE MANAGED.

SIR.—The management of the Quelvin Slate Quarry, as appears by a letter of one who is officially connected therewith, and signed "A Secretary," which appeared in last week's Journal, is so startling as to its economy that I am much tempted to ask "A Secretary" whether the said manager and secretary are not large shareholders in the concern, and whether the twelve months' service? What practical and experienced quarryman would undertake such an important office for the above pauper sum? Either quarrymen must have a plentiful in the famous (?) Betws than in any other quarry district in Carmarthen, or the manager must be connected with other undertakings in the district, and consequently does not and cannot devote much time to this, which, perhaps, in the long run, will prove worse than paying a proper sum to an experienced manager for devoting his whole time to this one quarry. Besides, a quarryman ought to get at least from £1. to 2s. a week, much more a manager, else he will soon be reduced to short rations, especially in the district where the quarry is situated. As a rule, quarrymen at present are very scarce, as witness at the Cwm Eigia Quarry, where most of the quarrymen are of the Betws district, a distance of at least six miles, so that it is very improbable that quarrymen would stop in the Quelvin Quarry, even at the manager's salary of £71. When they could easily obtain, at least in other districts, from £50. to £60. The same remark equally applies to the item, secretary, &c., &c. But that some quarries are very well managed, as stated by "Pioneer," is an undeniable fact; and I fully agree with your correspondents on this subject, that it is high time for shareholders to look into their interest in this matter. Capitalists before speculating in slate quarries, which are put forward with the most encouraging (yes, tempting) prospectuses, directors, engineers, brokers, &c., would do well to consult a disinterested quarryman in the district of the quarry on its merits and prospects, and not to rely too much on the reports of geological inspectors, and such like (which invariably accompany the prospectus), who are engaged for the purpose by the vendors; and also not to invest, except in a proved quarry. A very proper remark on this subject was made by "Quarry Manager" in his letter on "Quarries and Quarrying," by S. Jenkins, when he asks—What effect will your correspondents on this subject have on the quarrymen?—

Beaumaris, May 4.

THE METALLIFEROUS MINES BILL.

SIR.—Being a miner, and, therefore, one of the class that Lord Kinnsel in his Bill professes to protect, perhaps you will allow me to make a few remarks on the subject. Much has already been said of the injurious effect the passing of his lordship's bill will have on the mine owners and managers, which, I am sorry to say, if allowed to pass into law will prove to be true, but as yet nothing has appeared to show the calamitous effect it will have on the poor working miners. That the operations of the greater portion of the 300 progressive mines marked in the Journal will be suspended to me is quite evident, since gentlemen who are now speculating in those mines would rather empty their superfluous capital in one of a thousand other ways, and, perhaps, in any other country submit to the dictations of those *fossiles et modèles* from the Royal School of Mines, or counter-hoppers, barbers' clerks, or anyone else, save the ones they may choose to appoint. The winding-up of those 300 progressive mines will be the mass of turning thousands of poor miners that can do nothing else out of employ. How, then, are they and their families to be maintained? Miners are as plentiful now that they are obliged to work for from £1. to 4/- per month, which his lordship must admit is quite little enough for the support of himself, his wife, and six or seven children; but if those 300 miners are wound-up, miners will be as plentiful that they will catch at 30s. per month, and thousands of men be then wandering the country, seeking some means of obtaining a bit of bread by which they can keep body and soul together. The fact is, it will be the first step towards riots, robberies, murders, and other vicious practices, which will be resorted to in order to obtain a morsel rather than starve. The inhabitants of Deva and Cornwall will be in a worse plight than the cotton operatives were by means of the American war. If this lordship could exhort some means to raise the poor miners' wages to 6/- per month instead of reducing it to 30s., I am sure miners would appreciate his services as a boon; but this bill will be a decided curse to poor miners, and detrimental to all systematic mining.

Many of those progressive mines are selling large quantities of ore, but not enough to pay cost, or to place them in the Dividend List; and these mines might, with some difficulty, continue to do so, if the bill is not interfered with by this bill, and give employment to thousands of miners; but if they have to lay out any extra money in unnecessary fixings, &c., they (the mines) will be suspended at once. In this case H.R.H. the Prince of Wales, Duke of Cornwall, will come a long way short of his £6,000/- per annum from the Duchy of Cornwall. I hope, therefore, his agents will interfere in this matter, and try to get the measure withdrawn.

It is very clear to me that "M. D." knows nothing of mining, or he would not have picked out three managers, and placed them above all others, merely because they were so fortunate as to be managers of a good mine each. I have worked under one or more of the same managers, and in different mines under their superintendence, and it so happened that in two of the places the air was so foul that the candle would not burn unless it lied flat on its side. I have no doubt that it injured me, but if I did not work there I could not work anywhere else, employment at that time being so scarce.

"M. D." appears to be a very conscientious and liberal-minded gentleman, and, doubtless, is a believer in the doctrine of restitution; if so, perhaps he would have no objection to remit the trifles of the dividends he has received, which, according to his account, was blood money, or money obtained by the systematic suffocation of me, as I have worked in those great dividend mines in foul air. If he will make amends in any other way I shall feel much obliged, and be glad to become his humble servant in some other capacity than working miner.

Meetings of Public Companies.

FRANK MILLS SILVER-LEAD MINING COMPANY.

The quarterly meeting of shareholders was held on Tuesday, at the Teign Inn, about two miles from the mine. The chair was taken by Mr. T. SMITH, and there were also present Messrs. T. Glover, W. CROWSON, C. Macie, J. O. Harris, O. AVES, F. Barker, E. COOKE, J. T. Fisher, C. Wardroper, R. C. Johnson, C. Wescombe, and Capt. Nicholls and Cornish. The PURSER (Mr. C. Wescombe) read the report of the committee and a statement of assets and liabilities, as follows:—

Balance, reserved fund	£2125 17 9
75 tons of lead ready for market	1200 0 0 = £3338 17 9
Cost payable May 18	£350 0 0
Ditto (estimated) June 11.....	870 0 0 = £1700 0 0

Nett assets (in addition to ore not cleaned)

£1628 17 9

Mr. COOKE remarked that it would be fairer if the returns were estimated as well as the probable cost in making out the list of assets and liabilities.—Mr. WESCOMBE said no doubt that would show better for the mine; but it was desired to state the position they were in if the works were stopped next Saturday. Again, nothing had been said about the halving or one underground.—The CHAIRMAN added that they were gradually shortening the time for sampling. The committee particularly desired not to make the accounts appear better than they were.

Mr. JOHNSON remarked that the February cost-sheet went up to March 11, so that their position was really better by 300*t*. than it was shown to be.

Capt. NICHOLLS (the chief agent) then produced the report, as follows:—

May 9.—Since the last general meeting we have sent down, and fixed the plunger-lift at the 115, with rods and everything complete, we are, therefore, now ready to commence sinking as soon as practicable. The 115 north, on the west lode, has been extended about 12 fms.; the west part of the lode, which has been carried about 4 ft., has yielded from 4 ewt. to 10 ewt. of lead per fm., or an average value of 8*t*. per fm., at an average cost for driving of 3*t*. 1*s*. per fm. Our progress here would have been greater but for the men (the shaftmen) having been engaged about the pitwork allotted to. We have a rise going up in the back of this level (now up about 3*t*. 1*s*. fm.) which is laying open a tributary ground that will all come away. The winas, coming down against the bottom of the 100, is sunk 9*t*. 1*s*. fm., thus leaving about 1 fm. more to communicate and thoroughly ventilated the bottom level. The 115 north, on the east lode, has been extended about 9 fms., the whole of which drivage has opened out ground that will work at a high tribute; the end is now poor, and being short of men to work more important places, it is at present suspended. The 100 north, on the west lode, has been extended about 14 fms., the lode averaging 3 ft. wide, and yielding 7 cwt., or an average value of 8*t*. per fm., at an average cost for driving of 3*t*. 5*s*. per fm.; this end has now been extended 90 fms. north from engine-shaft, the whole of which drivage has gone through a continuous productive lode, averaging from 8 ewt. to 10 cwt. of lead ore per fm. We have two stopes working in the back of this level, yielding respectively 15 cwt. per fm., 1*t*. 1*s*. per fm., and 1*t*. 1*s*. per fm., and stopping at 2*t*. and 2*t*. per fm. According to the underlay of the lode in these stopes, we think it will go up to the west of the 8*t*. fm. level. We have, therefore, now a cross-cut going out to intersect it at this level. The lode, in the northernmost wide stope, in the back of the 45, is yielding 2 tons, or worth 2*t*. per fm., or an average for the width of lode. The lode in the stope adjoining to the south is also yielding 2 tons, or worth 3*t*. per fm. The former stopping at 2*t*. and the latter at 3*t*. per fm., the both of which are looking quite as promising going up as at any former period. Our tribute department consists of 10 pitches, working by 21 men, at tributes averaging 3*t*. 5*s*. per fm. The prospects throughout the mine are good, but we regret to say during the past few weeks the air has been unusually bad, which has somewhat impeded our progress; however, Lord Exmouth has now kindly given permission to sink an air shaft at the north part of the mine, which we hope to get through to the 45 in about three months; this will properly ventilate the mine. Since sampling on April 20 last we have dressed 55 tons of lead, and if the fitness of the air does not prevent our operations being properly carried on, we hope to make the same amount of profit for the present as for the past quarter.—J. P. NICHOLLS, J. CUNNINGH. H. ANDREW.

In answer to a question, Capt. NICHOLLS said he was ready to begin to sink the shaft as soon as he could get men.

Mr. WESCOMBE said he must be permitted to point out the very important fact that in driving out the 100, and going up 4 fathoms, it had been found that they were pursuing a hole which had not been seen in the 8*t*, but by driving a cross-cut from the 8*t* it would soon be reached.—Capt. NICHOLLS said they were undoubtedly close upon that lode.

In reply to a question, the PURSER said an air-shaft was being made into the 45 north, and by means of winzes could be continued to any depth. The mine would then be thoroughly ventilated.—The CHAIRMAN said he was informed Capt. Hancock had been employed by Mr. COOKE to inspect the mine on the previous day, and he would ask him, if Mr. COOKE had no objection, whether he could confirm Capt. Nicholls's report?

Mr. COOKE said he knew Capt. Hancock's statement would be favourable, and he might add that Capt. Hancock ought to be an authority, having been connected all his lifetime with some of the best lead mines in Cornwall. Frank Mills Mine was, in some respects, a peculiar one, but Capt. Hancock was as capable of judging of it as any one.—Capt. Hancock quite agreed with what had been stated in Capt. Nicholls's report, and he did not know that in the one he himself now had in preparation he could add anything more, or state anything else.

The position of the mine in the 100 and the 115 was, on the whole, better than one could expect from the levels above. Another important point to which his attention had been drawn was the direction of two lodes, which would form a junction about 20 fms. deeper. This was an important matter for the shareholders to watch. The whole stratification was very favourable, and the improvement of the stratification at the 100 and 115 gave the prospect of a still better lode than they now had at the 130. As regards the working, no miner or mine agent could find fault with it in any shape or form.

The CHAIRMAN said they were much obliged to Capt. Hancock for his remarks, and the confirmation of their own agent's report by one so competent was most satisfactory.

He was pleased to hear him say the mine was being worked fairly, and this confirmed the confidence the committee had in their own agents.

Mr. SMITH then moved that the report and accounts be adopted, which was seconded by the Rev. C. WARDROPER, and carried *mem dis.*—On the motion of Mr. T. GLOVER, seconded by Mr. J. T. FISHER, a dividend of 7*s*. per share was declared.

Mr. COOKE said himself and others had been struck by the fact that Capt. Nicholls's reports were somewhat meagre as compared with the returns made. The impression given was that they were not opening up as much as they took away.—Captain Nicholls said he could not report more fully, the 80 fm. level not having been driven over the 100. He reported once a week, and took the average from the workings. His object was to report as truthfully as possible; he did not think it was any benefit to the mine to colour the reports.—Mr. COOKE only wished to remark that the reports were too modest. He knew Capt. Nicholls was a pattern mine agent, and that his returns were more equal to his reports. It was a matter of great confidence to know that he was not taking away as much as he was discovering. He knew enough of mining to be aware that when they got better air their workings would be increased largely.

Capt. Nicholls said it was much better to keep down the reports, and he could say of

Capt. Nicholls that he never promised them 100*t*, and gave them 99*t*.—The CHAIRMAN said the committee were always pleased to have enquiries made, and were most anxious to give the fullest information on the accounts or mine. If this plan was always adopted there would be a great deal more confidence in the mining world.—Mr. OWEN AVES suggested that in future reports the number of fathoms driven should be stated, as well as the expense of working and the returns.—Mr. WESCOMBE said the agent might also state, as had been done before, the number of hands employed.—Capt. NICHOLLS replied that there would be no difficulty in stating these particulars.—Mr. COOKE observed that it could not be too well known that they continued the exploring of new ground, and did not confine the working merely to the profitable ground.

The committee were re-elected on the motion of the Rev. C. WARDROPER, seconded by Mr. COOKE; and the meeting concluded with a vote of thanks to the Chairman.

GREAT DARREN MINING COMPANY.

A general meeting of shareholders was held at the London Tavern, on Thursday, Mr. CARTER (Coroner for Kent) in the chair.

Mr. T. SPARCO (the manager) having read the notice convening the meeting, a statement of accounts was submitted, made up to the end of March, which showed a credit balance of 100*t*.

The report of the agent was read, as follows:—

May 9.—For the information of the general meeting, I beg to state that since the last meeting of the company we have driven the 15 west 20 fms., making a drive also from the shaft in this direction of about 27 fms. We have opened out the lode for 15 fms. in length, and 7 fms. of this has been stope up to communicate with an excavation made in the bottom of the 10, and all the ground has been taken away (at this point) between the two levels. The average production of ore from this piece of ground is about 7 cwt. per fm. Another stope has been opened to the west of the former, for about 6 fms. in length, and producing on an average of 5 cwt. of lead ore per fm. The drivage west beyond the last-named stope has been rather unproductive.

At the present end, fearing we might have missed any portion of the lode, we have driven a cross-cut south 2 fms., but with no other result than finding a few small strings and spots of ore. We continue to drive the 15 west by four men, with a hope of making some discovery daily, as the level over the same point seems to have formerly been productive. The same level has been driven east of the shaft about 3 fms., on a kind of lode. Oliver's adit has been driven west since the last meeting 12 fms., and in this drivage some short bunches of ore have been passed through, as will be seen by the section. The driving of this level is of great importance, as tending towards the old mine to the west; there is now only about 80 fms. between the two points. The whole of this drivage will be continued upon the course of the lode, and great discoveries may be made at any moment.

At the date of the last meeting we had a good stope of ore ground in the back of the 10 fm. level, from which we confidently expected a regular supply of ore; but in a month after, to our surprise and disappointment, we communicated with old workings, which had been carried down from the bottom of Oliver's level, and therefore our supplies from this point were entirely cut off; and with this, our inability to dress the ore raised during the winter, is the cause of our having returned two parcels of ore only instead of three, as expected. I am happy to say that since writing the above the 15 west has improved, and is now producing a good mixture of lead ore for about 1 ft. wide on the south part of the lode, with every probability of further improvement. As regards the future working of the mine, I recommend to continue the driving of the 15 west, the stope away of the ore ground in the back of the good lode goes down for about 7 fms. in length. I strongly recommend the driving on the course of the lode there is a strong probability of making important discoveries; seeing from the old levels above that the former workers had much deeper point. I may mention that all our operations are on the lode, and consequently very important discoveries may at any moment be made. The machinery on the mine is in good order, and quite equal to our requirements.—R. WILLIAMS.

The CHAIRMAN said, by the report just read it would be seen that the operations at the mine had now reached a point in depth beyond the deepest workings in the "ancients"; and as had been seen in the accounts, the operations in those deepest workings had resulted in a profit. In all mining operations a considerable amount of time was necessarily required to overcome the dead work, and to erect the necessary machinery; but when such operations had been accomplished, and the works began to show a margin of profit, all the practical difficulties of mining had been overcome. As regards the present meeting, he might state that it was the intention of the board to have deferred the holding of it until another parcel of ore had been realised; but he need hardly say that, during the severe weather they had lately had, dressing operations had been necessarily re-

taimed, and that thus the sale of ore had been unavoidably deferred. Had that parcel of ore been sold, the directors would, upon the present occasion, have been in a position to recommend a dividend; but, under present circumstances, all he could do was to congratulate the shareholders upon the fact that the operations of the past quarter had resulted in a profit, and to express a hope that at the next meeting the directors would have something much more tangible to present to their constituency than a favourable report and encouraging prospects. (Hear, hear.) He then moved that the report and balance-sheet should be received and adopted.

A SHAREHOLDER enquired if the deepest point of operation from which the ore was now being produced was of sufficient depth to unwater the old mine?—Capt. WILLIAMS replied, that by continuing the driving of the present levels the old mine could be completely unwatered for its whole length, which was upwards of 800 fms.

Capt. WILLIAMS explained by a section that the run of ore ground was between 400 and 500 fathoms.

A SHAREHOLDER enquired if the price of lead had fallen since the first parcel of lead was sold, or the sawn by the communication of the levels going west.

Capt. WILLIAMS explained by a section that the run of ore ground was between 400 and 500 fathoms.

A SHAREHOLDER understood that the third parcel of lead had been sold.—Captain WILLIAMS said such was not the case.

Mr. SPARCO observed that it was the intention of the board to have sold the third parcel of lead before calling the shareholders together; but, as several enquiries had been made, and as he had received communications from different shareholders, he determined to atoms convene a meeting, so that shareholders might have an opportunity of knowing the exact position and prospects of their property.

A SHAREHOLDER enquired how it was that the company's assets were not put forth in the balance-sheet?—Mr. SPARCO said that the accounts of a cost-book company were prepared in a different way to those of a limited liability company. In the former case credit was not taken for ore raised or dressed, or the value of the machinery and materials, which was always done in a limited liability company. As far as this mine was concerned, there was a large quantity of ore at surface, and a great deal more laid open underground, in addition to which there was the value of a field of machinery, which had cost several thousand pounds. Neither of those was taken into calculation in the balance-sheet.

A SHAREHOLDER enquired if any unproductive ground was likely to be met with in the prospecting of the dead works?—Capt. WILLIAMS certainly did expect some unproductive ground, but he expected to make some important discoveries of ore ground, as the operations were at every point upon the course of the lode.

The report and accounts were received and adopted. A vote of thanks to the Chairman terminated the proceedings.

NATIONAL PROVINCIAL BANK OF ENGLAND.

The thirty-second annual meeting of proprietors was held at the new bank premises, Threadneedle-street, on Thursday.

Mr. J. M. LAURIE in the chair.

The CHAIRMAN said:—I cannot but think that the circumstances under which we meet for the first time in this building, destined, I trust, to see many years of success to the National Provincial Bank of England, are singularly propitious. Never was an edifice inaugurated under more favourable auspices. For, gentlemen, at the conclusion of a year of unprecedented prosperity, we are also, I trust, on the eve of seeing struck off the last fetters with which legislative restrictions had shackled our freedom of action, and may, I hope, look forward to a course of uninterrupted progress and development. You are aware of the disabilities under which we have been suffering; not only have we been prevented from issuing notes payable to bearer within a distance of 65 miles from London, but we have been forbidden to enter upon the ordinary business of banking in the metropolis, and have been actually prohibited from acting as town agents for our own branches, having been compelled to employ other establishments to execute duties which our own officials were so much better qualified to perform. Gentlemen, there is, when we are suffering under a grievance imposed upon us, a certain sense of compensation if we can see that the law of which we complain has no favourites, and that the rule, however obnoxious, is extended impartially over all, but that consolation, such as it is, was denied us. By a strange legislative oversight Scotch and Irish banks, constituted as we are, issuing their own notes, are not hampered by the same restrictions; and we were thus, in addition to a sense of great practical hardship, galled by a feeling of injustice. Our only remedy for this state of things was a sacrifice of our circulation—a sacrifice which we were most reluctant to recommend to you, but to which I fear we must in the end have submitted, so great have we felt the inconvenience of being excluded from our own proper position in the metropolis. I am aware that this is no place for political discussion, and that it would ill become me, as your Chairman, to express either party censure or party applause, but I am sure I shall not be giving offence to the sentiments of my colleagues nor to my own, if I did not record our cordial sense of gratitude towards Mr. Gladstone, for the very liberal spirit in which he has considered our grievances; for the kind and courteous manner in which he has always received our representations, and for the courage with which he has exposed himself to a troublesome opposition in dealing with a great subject. Doubtless the Chancellor of the Exchequer, acting for the public, has sought what he considered to be the public interest. We have had to make some sacrifices; but a vested interest of 18 years in our circulation, the right to incorporate other banks of issue, and to extend our circulation by the amount of their authorised issues, thus removing all our disabilities, and giving us fresh privileges, is a result of which we may well rejoice, and for which we may well be grateful. Gentlemen, I think it is only due to my hon. colleague, the Member for St. Ives (Mr. Paul), that I should bear this public testimony to the ability and industry with which he has advocated our cause. Deprived too soon of a conductor of as much merit as he, I shall I hope be justified in opposing any change in the constitution of the bank, inasmuch as the present system had always worked remarkably well, although they had passed through times of considerable difficulty. As regards notice being given of the names of those proposed to fill up any vacancies that might occur in the direction, he might be justified in opposing any change in the discharge of those duties which the directors could come before the shareholders and state that the bad debts were little or nothing, he thought they ought to be perfectly satisfied. (Hear, hear.) It was, however, a matter entirely in the hands of the meeting; but at the same time he thought he was justified in opposing any change in the constitution of the bank, inasmuch as the present system had always worked remarkably well, although they had passed through times of considerable difficulty. As regards notice being given of the names of those proposed to fill up any vacancies that might occur in the direction, he might be justified in opposing any change in the discharge of those duties which the directors could come before the shareholders and state that the bad debts were little or nothing, he thought they ought to be perfectly satisfied. (Hear, hear.)

Mr. COOPER said he could not be permitted to point out the very important fact that in driving out the 100, and going up 4 fathoms, it had been found that they were pursuing a hole which had not been seen in the 8*t*, but by driving a cross-cut from the 8*t* it would soon be reached.—Capt. NICHOLLS said they were undoubtedly close upon that lode.

In reply to a question, the PURSER said an air-shaft was being made into the 45 north, and by means of winzes could be continued to any depth. The mine would then be thoroughly ventilated.—The CHAIRMAN said he was informed Capt. Hancock had been employed by Mr. COOKE to inspect the mine on the previous day, and he would ask him, if Mr. COOKE had no objection, whether he could confirm Capt. Nicholls's report?

Mr. COOKE said he knew Capt. Hancock's statement would be favourable, and he might add that Capt. Hancock ought to be an authority, having been connected all his lifetime with some of the best lead mines in Cornwall. Frank Mills Mine was, in some respects, a peculiar one, but Capt. Hancock was as capable of judging of it as any one.—Capt. Hancock quite agreed with what had been stated in Capt. Nicholls's report, and he did not know that in the one he himself now had in preparation he could add anything more, or state anything else.

The position of the mine in the 100 and the 115 was, on the whole, better than one could expect from the levels above. Another important point to which his attention had been drawn was the direction of two lodes, which would form a junction about 20 fms. deeper. This was an important matter for the shareholders to watch. The whole stratification was very favourable, and the improvement of the stratification at the 100 and 115 gave the prospect of a still better lode than they now had at the 130. As regards the working, no miner or mine agent could find fault with it in any shape or form.

The CHAIRMAN said they were much obliged to Capt. Hancock for his remarks, and the confirmation of their own agent's report by one so competent was most satisfactory.

He was pleased to hear him say the mine was being worked fairly, and this confirmed the confidence the committee had in their own agents.

Mr. SMITH then moved that the report and accounts be adopted, which was seconded by the Rev. C. WARDROPER, and carried *mem dis.*—On the motion of Mr. T. GLOVER, seconded by Mr. J. T. FISHER, a dividend of 7*s*. per share was declared.

Mr. COOKE said himself and others had been struck by the fact that Capt. Nicholls's reports were somewhat meagre as compared with the returns made. The impression given was that they were not opening up as much as they took away.—Captain Nicholls said he could not report more fully, the 80 fm. level not having been driven over the 100. He reported once a week, and took the average from the workings. His object was to report as truthfully as possible; he did not think it was any benefit to the mine to colour the reports.—Mr. COOKE only wished to remark that the reports were too modest. He knew Capt. Nicholls was a pattern mine agent, and that his returns were more equal to his reports. It was a matter of great confidence to know that he was not taking away as much as he was discovering. He knew enough of mining to be aware that when they got better air their workings would be increased largely.

Capt. Nicholls said it was much better to keep down the reports, and he could say of

Capt. Nicholls that he never promised them 100*t*, and gave them 99*t*.—The CHAIRMAN said the committee were always pleased to have enquiries made, and were most anxious to give the fullest information on the accounts or mine. If this plan was always adopted there would be a great deal more confidence in the mining world.—Mr. OWEN AVES suggested that in future reports the number of fathoms driven should be stated, as well as the expense of working and the returns.—Mr. WESCOMBE said the agent might also state, as had been done before, the number of hands employed.—Capt. NICHOLLS replied that there would be no difficulty in stating these particulars.—Mr. COOKE observed that it could not be too well known that they continued the exploring of new ground, and did not confine the working merely to the profitable ground.

Mining Correspondence.

BRITISH MINES.

BEDFORD-AUR.—May 11: The end driving north on Brynia lode has been driven 2 ft. during the last week; a very nice branch of lead has been cut here, but I cannot say much about it, worth at present 6 cwt.s. per fm. The end driving north from Spencer's shaft has been driven 3 ft. since last week's report; the lode is 6 in. wide, producing 8 cts. of lead ore per fathom. The end driving north on Curtis's Wren lode has been driven 2 ft. during last week; the lode is small and poor for lead. The end driving south on St. Vincent's lode has been driven 3 ft., for all the length of drivage we have had a branch composed of clay, but unproductive for ore, on the footwall; it is now looking very promising with a branch of solid lead 2 in. wide. The branch in the hanging wall is improving. This end will now yield from 20 to 25 cts. per fm.

BEDFORD CONSOLS.—J. Mitchell, May 11: On Saturday last the cross-cut was driven north and south in the middle adit level, by six men, at 9 ft. per fm., started the month, or cut the cavan or lodes. The ground in the cross-cut north still continues hard and sparse for progress, but is of a highly mineralised character. In the cross-cut south the water is still coming from the end, which leads me to hope there is more lode standing further south. The men have been engaged the last few days in taking out some of the old air pipes which are worn out, putting in new, fixing trap-door in the shaft, &c., which has greatly improved our ventilation.

BEDFORD UNITED.—James Phillips, May 10: The stope in the 130 west will produce 3 tons of ore per fathom. The lode in the winze sinking in the 115 west is 2½ ft. wide, producing 3 tons of ore per fm. There are four stope in the back of this level, each of which will produce 3 tons of ore per fm. In the 103 west we are still driving in a northerly direction. The stope in back of this level is worth 2 tons of ore per fathom. There are two stope in the 90 west, each yielding 2 tons of ore per fm. The south lode has not been taken down in the 80 west. The lode is not yet intersected in the 70 cross-cut north; but little has been done here in the past month, as the men have been employed stoping. The stope in the 70 west is worth 2 tons of ore per fm. There is no alteration in the 58 east, the lode being small and unproductive. The stope in back of this level, and the stope in back of the 47 and 35, will each yield 2 tons of ore per fathom. In the 75 east and west, on the north lode, the ground is hard, being much mixed with caven; the lode has not been taken down since last report. In the 62 east the lode is 2½ ft. wide, producing good stones of ore, and is very promising for improvement. The ground here is very congenial.

BILLINS.—F. Evans, May 11: We shall finish the pitwork to the 80 in a few days, and expect to cut the lode in the 70 cross-cut east. Every stem it must have turned north a great deal. The pitch in bottom of the 70 west will produce 1 ton per fm.

BRIXTON HEMATITE IRON.—W. Williams, May 9: Since we commenced driving our 17 fm. level west the lode has improved, being now 2 ft. wide, with every indication of further improvement. We have our incline to work at the Derrick stops, and it answers admirably well. At our Derrick stops the lode is much the same as last reported. Through the very heavy rain during the last few days we have not been able to do so much as we could wish.

BOSCAVEN.—R. Giles, May 6: The sumpmen are now engaged in taking down the lode at the 80, east of sump-winze, where the lode is worth 10/- per fm. The men are stopping in back of the 80, west of sump-winze; lode worth 6/- per fm. The lode in the 70 east in bottom of the 70, east of the sump-winze, is worth 10/- per fm. In the stope in bottom of the 70, west of No. 2 winze, the lode is worth 12/- per fm. The lode in the 60, driving in back of the 70, west of Hunter's shaft, is worth 10/- per fm. The lode in the 40, driving in bottom of the 60, west of sump-winze, is worth 8/- per fm. The lode in the 30, driving east of Hunter's shaft, is producing stones of ore, but not to value. The ground is still favourable for driving south of caunter shaft at the 30. The lode in the 30, driving east from Hallenberg, is worth 6/- per fathom. I calculate from two to three weeks more from this time to communicate Parry's shaft with the deep adit driving east from Hallenberg. Nothing else new since last reported.

BOTELLET.—T. Trevillion, May 10: We have completed sinking the engine-shaft to the 36, also cased and divided down the shaft, so as to enable us to draw all the stuff with the whim. We have extended the cross-cut 2 fms., and are hourly expecting to reach the western lode; the ground is favourable for exploring, and of a promising character, highly charged with mudi and good shoots of lead, which looks well for the lode. Little has been done in the 26 south since my last report, as I was obliged to remove the men to sink a winze in bottom of the 16 for ventilation. I am glad to say we have communicated to the stops on the western lode, and the air throughout the mine is very good. The stope in the back of the 26 is not looking quite so well as when last reported.

BOTTLE HILL.—J. Eddy, May 10: The lode in the 12, driving east of new shaft, still holds its size, now about 8 ft. wide, and turning out work of better quality than it has for some time past. The lode in the stope in the back of this level is about the same size, and turning out work of good quality. The lode west of shaft, in the 12 end, and also the stope in the back of this level, are turning out about the same quality tinstuff as for some time past. The lode in the rise in back of the 24 is about 8 ft. wide, worth about 7 ft. per fm.

BROWNFOLDY.—T. Kemp, May 10: We have resumed the stoping above the back of the 52 fm. level, both east and west of winze, and the lode is still without change, yielding about 2 tons of lead ore per cubic fathom. The lode in Barton's cross-cut, in the same level, is much the same as when last reported; it still continues to produce stones of lead ore, and is very hard; present price for driving 9/- per fm. The stope in bottom of the 40 is producing 1½ tons of lead ore per fm. The tribute pitch above the 40 continues to look well, and the men are breaking some good lead.

BYRFON HALL.—Thomas Pierce, April 28: Our pitches are promising well at Grange's. The 70 yard level, on Ward's vein, south-west from shaft, is yielding some ore daily, with great likelihood to improve day after day. The slope of grey ground which we have discovered is proving well as we go down, and by all appearances will drop into a vein. Simmons's shaft is looking very promising. We have some branches of lead running from hanging to heading side, which makes the vein likely to be a probable one, and it will be a very strange thing to me if it does not turn out well. The Acre-terre discovered on the north cross-cut is yielding ore daily, and likely to improve.

BYRYN GWYNN.—F. Evans, May 10: There is no particular change at the engine-shaft since the last report. We have much pleasure in reporting an improvement in the 102 east; the lode is about 1 ft. wide, producing excellent stones of lead ore, and likely to be of value shortly; in fact, there is a good course of ore immediately before this level, and any discovery here will be of importance. There is no particular change in the pitches; if anything, they are not looking quite so well as last reported, but we anticipate a change for the better. All the machinery is working well, and everything at surface and underground is being pushed on with energy. We sampled for next Thursday's sale 30 tons of lead ore.

BYREYNS.—W. Nottingham, May 10: There is no change in the level, driving south from the bottom of sump, in cross-cut, north side of incline, east of shaft; this is being unproductive. I have put two men from this place to break some lead from this joint, going north of said cross-cut. The sump on south side of incline, east of shaft, is sunk as deep as it is required for trying the ground around this place; we shall now resume driving the level south. The cross-cut driving west from bottom of incline, east of shaft, is less productive for lead, the joint being in rather a disordered state again, caused I think, by some north and south joints crossing this. The level driving north-east from bottom of incline, east of shaft, is in easy ground for progress; being near the top of the flat, we have the hanging-ground on the east side and limestone on the west side of the level. The latter will be our guide in driving this level, as it is my object to extend this level eastward as much as possible without leaving the flat. We have finished taking away the ore ground in the north part of the mine, and shall remove these men to make some trial in the ground above Clark's level. There has but little work been done in the stope, north side of Simpson's level, since my last, one of the men being unable to work.

BYNTAIL.—J. Rich, May 11: In the 20 east, on the south part, the ground has altered this week, and the lode presents indications of a very favourable character; the outside part, about 3 ft. wide, is apparently a good mixture of lead ore. We are desuing a piece of lode which we shall cut down to-morrow or Saturday, when I will again write you relative to it. In this level east, on the north part of lode, there is no alteration since last week. In the 30 east, driving on the south part, we expect to meet the ground alluded to in the 20 in a short time. The lode in the 30 west is 3½ ft. wide, containing a little ore; from the appearance of the ground I think the ore in the bottom of the 20 has dipped west fast, evidently influenced by a slide that crosses that level.

CAP-EWELL.—Ralph P. Goldsworthy, May 10: The lode in the 90 and 80 continues to yield good stones of tin. In the winze sinking below the 80 the lode is 4 ft. wide—tinny, of a very promising character. In the 70 east, 55 fathoms from the shaft, we have cut through the lode, and find it fully 4 ft. wide, producing tinstuff of 2 cts. of tin to the 100 sacks. In the winze sinking below the 70 east the lode is large, and very good. The 70 west, and the winze sinking below that level, are with-out change. This remark will apply to the stope in back of the 55 east.

CARADON AND PHENIX CONSOLS.—W. Richards, May 9: The engine-shaft is now 6½ fm. below the 30 fm. level, and I am glad to acquaint you that the ground is improved for progress, the present price being 20/- per fathom, started the month. The lode in the bottom of it is 4½ ft. wide, containing quartz, capel, peach, jamps of mudi, and a little yellow copper-ore—a promising lode. During the past fortnight we side of which presents very much better appearances, the leader part being 18 in. wide, and contains kindly quartz, blonde, peach, quantities of mudi, and good stones of yellow copper. The other part of the lode being capel, impregnated with mudi—and very strong and promising lode for the depth. The prospects of the mine are very good and cheering at the present, and we anticipate much better things as we get deeper.

CARADON CONSOLS.—Wm. Rich, May 9: During the past week we have driven through a small branch in the 80 south, containing good spots of rich yellow and black copper ore. The cross-course on which we are driving carries pretty much mudi, and seems very kindly.

CARDIGAN CONSOLS.—James Sanders, May 11: We have intersected the lode in the cross-cut south in the 20. I have been underground this morning, and I am pleased to say that, as far as can be seen, it is a very promising-looking lode, with good spots of copper ore in it, and a great quantity of water issuing from it; in fact, I have not seen one-third the quantity coming from either level in the mine for the last seven years. By the present appearance of the lode, and the ground in connection with it, I am led to believe that when developed at a greater depth it will turn out well, but as only two men have been blasted in it, I cannot at present state the width of it, you will hear more about it in a few days. The part of the lode driving on in the 20 east is very part of it is standing to the south, which I think it would be advisable to prove by driving a cross-cut a fathom or two in that direction. The lode in Eggarraith adit, it is a very fine-looking lode, with good lumps of copper ore occasionally, but not in sufficient quantity to set a value on. Looking at the appearance of the lode in this place, being only 15 fathoms below surface, my opinion is that something extraordinary good will be met with when opened out at a reasonable depth (say 20 or 30 fathoms deeper). The lode in the boundary adit is worth the width of the level, and part of it standing by the post, at present, which may be accounted for by a band of black shale and mudi, which came from the level from the north side, and running almost parallel with the south side. I do not expect the lode will be of any value for mineral until it is clear from the influence of the shale, but after that I think an improvement may be expected. Although the mine is poor at present, I consider the prospects are very encouraging, and when properly developed, will make a good mine. Taking into consideration the character and the appearance of the lode (or what may be termed mineral channel), and the depth of the mine (only 30 fathoms below adit), I do not hesitate to say that I believe, if properly developed and extensively, it will be one of the best mines in Cardiganshire.

CARLISLE CAMBORNE.—J. Seccombe, May 8: We are making fair progress in sinking the engine-shaft below the 40. In driving the cross-cut north in this level the ground is a little improved.—South Lode: In the 40 east the lode is producing saving work; in this level, the lode is yielding 4 tons of copper ore per fathom. In the 30, east poor; in driving east in this level it is producing stones of ore. Clarke's Lode: The midway west is sinking of the western shaft below the 15, where the lode is yielding 1½ ton of ore per fm. The various stope are producing their usual quantities of ore.

CASTELL CARN DOCHAN (Gold).—J. Parry, May 9: We continue to find specks of visible gold. We have obtained 2 ozs. 6 dwts. 6 grs. of gold, from 19 cts. of lead-stuff, since my last by the Britten's machines. The stamps are completed, and have been put to work to-day. They will require a little alteration before we get to work.

CLARA UNITED.—J. Lester, May 10: Llywernog: The lode in the 50 east is about 2 ft. wide, composed principally of quartz and blonde, with a little lead ore, but not sufficient to value. Although the 50 west continues to carry a fair mixture of lead and blonde, it is not quite so good as it has been.—Dolwen: The level is now extended west far enough to be under the level driven east from the bottom of engine-shaft. I have put men to open a rise to it, and in doing so we have cut some very fine stones of lead ore. We shall not be long before we make the communication, then the lode will be taken down its whole width, and I shall be able to report upon its value; it looks now most promising.

CLOWNE WOOD.—E. Chegwin, May 10: We are still getting on well with cutting the plat; ground favourable, and we expect to complete it in a fortnight. The engine still continues to work well.

CROWN CONSOLS.—J. Vivian, W. Thomas, S. Simons, May 10: The engine-shaft is now down 7 fms. 3 ft. 8 in. below the 30; let to six men and three boys, at 32 per fathom; it is advisable to push down the shaft as fast as possible, therefore we have increased the number of labourers. In the 30, east of engine-shaft, we have set the men a contract to take down the north part of the lode to the present end, at 37, per bargain; we think the lode altogether is about 4 ft. wide, composed of spar, blonde, and some occasional stones of copper ore. The 20 cross-cut to drive north towards Curtis lode, with four men, at 31, 10s. per fm. We have also increased the number of men in this end, as we expect to reach the lode in the present month. The 20 is driven west of engine-shaft about 25 fms., where we have reached the elvan course, and have thought it wise to suspend its driving for the present. We have set the back of this level on tribute to two men, at 12s. in 11. The 30 is driven 34 fms. west of engine-shaft, and is very near the elvan course; it would be unwise in our opinion to drive it any further, as the water is rather abundant.

DEVON AND CORNWALL UNITED.—T. Neill, May 9: In the 12 no lode has been taken down since the meeting. The lode in the winze sinking in bottom of the deep adit level is worth 8 tons of ore per fathom. The lode in the rise is worth 6 tons.—William and Mary: The lode in the 34 east is much the same, worth 4 tons per fm. The lode in the 22 east is much the same. The lode in the winze sinking below this level is 8 ft. wide, a fine course of ore, worth 16 tons of ore per fathom. Two stope in the back of this level are worth 12 tons each per fathom.

EAST BOTTLE HILL.—J. Eddy, May 11: We have continued driving south through the elvan course; the ground has been found rather hard for driving. I am happy to say we have got through the elvan, now into killas, being easy ground, therefore I am of opinion that we shall see the lode in a week or ten days from this time.

EAST BROOK WOOD.—T. Bennett, May 10: We have intersected the lode at the 20 cross-cut north, and have cut through about 2½ ft. of the same; the lode is composed of quartz, peach, and ore, yielding of the latter 1 ton per fathom. After we have reached the north wall of the lode we intend driving east on its course, where it is evident, judging by the dip of the shoot of ore in the 10, that we may reasonably expect an improvement. We have also reached the north lode in the trial shaft; it is composed of peach, quartz, and occasional stones of ore. In sinking the trial shaft we passed through a large, masterly south underlie lode, which yields good stones of ore.

EAST CARADON.—J. Seccombe, May 10: Caunter Lode: The 80 east is worth 12/- per fathom; the 80 west, 10/-; the 90 east, 8/-; and the 90 west, 18/- per fm.—South Lode: The 80 east is worth 6/- per fm.

EAST CARN BREA.—Thomas Glanville, James Scholar, May 10: In the 70, driving east of the cross-cut, the lode is 2 ft. wide, producing 1 ton of ore per fm. In the 70, driving west of the cross-cut, the lode is 2 ft. wide, producing stones of ore. In the 60, driving east of Hunter's shaft, the lode is producing 1 ton of ore per fm. In the 60, driving east of Thomas's shaft, the lode is divided by a horse of killas; the south part is 2½ ft. wide, producing 5 tons of ore per fathom, and the north part is 3 ft. wide, producing 2 tons of ore per fathom. In the 50, driving east of Thomas's shaft, the lode is producing 1 ton of ore per fathom. In the rise above Buckley's shaft the lode is producing 2 tons of ore per fm. The other parts of the mine are without change to report on.

EAST CHIVERTON.—J. Nancarrow, May 9: Last Saturday we began our setting-day, I beg to report the engine-shaft is sunk 6 fms. 4 ft. below the 50; ground sunk last month 2 fms. 3 ft. 6 in., leaving 3 fms. 2 ft. more to sink the shaft to the 60. No change in the lode since my last; the country is congenial for the production of silver-lead. We have set the shaft for the present month to eight men, at 18/- per fm. We hope to sink the shaft to the 60 in six or seven weeks from this date. The new shaft north is sunk 6½ fms., and secured; ground still good; set to three men, for a month, at 11, 15s. per fm. We are pushing this as fast as possible, as it is the season of the year to do surface work.

EAST DARREN.—May 2: Taylor's Shaft: In the 116 east the lode is about 1½ yard wide, producing a little ore, but not to value, but we still look forward for an improvement in this level, as we are approaching the mass of ore ground, passed through in the level above. In the 104 east the lode is from 5 to 6 ft. wide, producing about 1½ tons of ore per fathom. In the 92 east the lode is from 3 to 4 ft. wide, composed of a clay-slate, carbonate of lime, and blonde, but unproductive for lead ore at present. In the 92, east of boundary winze, the lode is large, intermixed with small spots of lead ore, but not a sufficient quantity to value, and ground very hard for exploring. In the 80 east the lode is from 2 to 3 feet wide, composed of a dark clay-slate, blonde, carbonate of lime, and producing stones of ore at times, but not a sufficient quantity to value. In the 68 east the lode is from 3 to 4 feet wide, producing about 1¾ ton of lead ore per fathom.—Reed's Shaft: In the 50 west we are stripping down the north part of the lode, the lode being ½ yard wide, producing small branches of ore, but not a sufficient quantity to value. The stope and pitch throughout the different levels still continue to yield out their average quantities of ore. We have this day sampled 75 tons of silver-lead ore. Our machinery, with all surface operations, are progressing satisfactorily, and we have now some very nice showers of rain, after a long dry, and warm month, and we hope these showers will give us water enough for some time.

EAST GREAT WORK.—J. Lean, May 10: The ground in the engine-shaft continues hard, and the progress less satisfactory than it has been. In the 10 west we have about 9 feet south, and intersected the south part of the lode, which is about 1 ft. wide, composed of spar, mudi, and jack, with spots of copper ore.

EAST GUNNISLAKE AND SOUTH BEDFORD.—James Phillips, May 11: The lode in the deep adit is still improving, and is now producing good saving work, with every appearance of a further improvement. Other parts of the mine are looking much the same as when last reported.

EAST JANE.—J. Seccombe, T. Hodge, May 11: Setting Report: The 36 to drive south by six men, at 21, 15s. per fm.; lode greatly improved, now yielding 8 cts. of lead per fm. The 26 to drive north by two men, at 25s. per fm.; lode poor. The 26 fm. level cross-cut west by two men, at 45s. per fm.; ground easy, and favourable for lead. The 26 fm. level cross-cut to drive east from south level by two men, at 45s. per fm.; lode producing stones of lead. The deep adit to drive north by two men, at 30s. per fm.; lode producing stones of lead. A pitch in the 36 south by six men, at 47. per ton, and one in back of the same level by four men, at 61. per ton. The ground in the shaft is improving as we sink.

EAST GREAT WORK.—J. Lean, May 10: The following bargains were set on Saturday last:—Boorman's shaft to sink below the 40, by twelve men, at 18/- per fathom; we expect to communicate this shaft with the rise in the back of the 50 in about five weeks; the latter is now working by six men, at 12/- per fathom. Boorman's shaft to sink below the 60, by six men, at 13/- per fathom; lode worth 8/- per fathom. The 70 to drive east from Wilson's shaft, by six men, at 71. per fathom; lode producing stamping work for tin. The 60 to drive east of the junction, by six men, at 41. 10s. per fathom; lode worth 8/- per fathom. The 60 to drive north-east on the caunter, by six men, at 81. per fathom; lode worth 6/- per fathom. The 50 to drive east of the cross-cut, by six men, at 71. per fathom; lode producing stamping work. A winze to sink below the 50 fm. level, by six men, at 71. per fathom; lode worth 15/- per fm.

EAST PROVIDENCE.—T. Uren, W. White, May 10: The following bargains were set on Saturday last:—Boorman's shaft to sink below the 40, by twelve men, at 18/- per fathom; we expect to communicate this shaft with the rise in the back of the 50 in about five weeks; the latter is now working by six men, at 12/- per fathom. Boorman's shaft to sink below the 60, by six men, at 13/- per fathom; lode poor. The 70 to drive east from Wilson's shaft, by six men, at 71. per fathom; lode producing stamping work for tin. The 60 to drive east of the junction, by six men, at 41. 10s. per fathom; lode poor. The 60 to drive north-east on the caunter, by six men, at 81. per fathom; lode worth 6/- per fathom. The 50 to drive east of the cross-cut, by six men, at 71. per fathom; lode producing stamping work. A winze to sink below the 50 fm. level, by six men, at 71. per fathom; lode worth 15/- per

[MAY 13, 1865.]

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

GREAT WHEAL VOR.—The lode in Ivey's shaft is about the same as during the last fortnight, a large piece of it has been taken down, and presents better indications. There is a very important improvement in the veins sinking below the 162, west of Metal shaft; the lode is worth 50*s.* per fm., with every indication of holding down to the 174 fm. level. The 184, east of Metal shaft, is also improved, worth full 50*s.* per fathom, whilst the 184 west is reported not quite so well. The other parts are without any material change.

ROSEWARNE UNITED claims more than ordinary attention, and is likely to become at an early period a mine of considerable favour, its state and prospects being excellent. The next sampling will be equal, if not superior, to the last, with increasing returns, and the property may be considered sound and good in every respect.

TRENCHOM.—This mine is opening up well, and bids fair for a successful future. An advance in the price of tin (which is, no doubt, near at hand) would at once place it in the Dividend List, and result in a valuable property. It should be borne in mind, at the same time, that the mine is in a locality which has yielded immense riches, and will yet do so.

ST. JUST CONSOLS is looking very well for a good mine in depth. In extending the level east from the bottom of the Guide shaft, the lode is found to be 5 ft. wide, and of the most promising nature. Should it only continue, and there is every reason to suppose that it will do so, this little mine will become an exceedingly profitable concern to the shareholders. Three or four months' vigorous prosecution of this lode will open up a good paying property, if the present appearances continue.—A MINER.

GWYNFNYDD MINE returns for the week 5 ozs. 13 dwt. of Gold from 8*s.* cwt. of lode-stuff.

CASTELL CARN DOCHAN returns for the week 2 czs. 6 dwt. 6 grs. of Gold, from 19 cwt. of lode-stuff. Eight heads of stamps went to work on the 9th.

EARL JANE.—The shareholders in this mine will be pleased to hear that their property is gradually improving. They have a good lode in the 36 fathom level, which is increasing in value; and other parts of the mine are equally encouraging.

PROSPER UNITED.—A very important discovery has taken place in the bottom level (the 89), west of Hill's shaft, where the lode is valued at 5 tons of copper ore per fathom; and the veins below the 70, ahead of the 80 fathom level end, is worth from 15*s.* to 20*s.* per fathom. There were sold on Thursday 373 tons of copper ore for last month; about 10 tons of tin are also sold monthly.

OLD GUNNISLAKE MINING COMPANY.—At the board meeting, held on Thursday, it was announced that Captain Blakeley, of the Blakeley Ordnance Works, Southwark, had taken 500 shares in the company, and had accepted the office of Chairman. The transfer of the mines by the vendor to the company was reported as completed, and the mines in full work. The secretary informed the board that more shares had been applied for, but there were none to allot.

MELLANEAR.—This mine has been carefully inspected, both at surface and underground, by Capt. Joseph Vivian, of North Roskar, and Capt. John Nancarrow. Capt. Vivian reports that the sett is an extensive one, situated to the westward of, and in the same belt of mining ground as, Alfred and Great Alfred Consols. The geological features connected with the large deposits of copper found in those mines are continued in this, the clay-slate being unchanged in character, traversed by the same lodes and cleavage courses, and similar cross-courses. He recommends that they should, without delay, sink the engine-shaft with all possible dispatch, in order to get at the junction of the lode and cleavage course. Capt. John Nancarrow reports that the strength, size, and general character of the main lode, the very promising appearance of the north lode in the back, their numerous intersections by cross-courses, and the influence of cleavages, irresistibly point out this ground as having in itself all the elements of a great and prosperous mine.

THE GRYLLS MINES.—At Wheal Grylls considerable improvements are taking place. The last month's sale of tin was about 12 tons, which left a profit of nearly 100*s.* East Grylls sold 5 tons of tin last week, which paid the monthly cost. The mine is recently much improved. At Great Grylls, the cutting of Stephen's ledge and others at the junction, is attracting attention. In the cross-cut discoveries are confidently expected similar to those in the levels above.

EAST WHEAL LOVELL.—The lode in the new shaft, which was valued at 150*s.* per fm., has proved to be of greater value, and sinking is now being proceeded with upon this rich deposit of tin. The lode recently intersected in the 40 fm. level has been cut through; it is three feet wide, and worth from 60*s.* to 70*s.* per fathom; driving will be commenced east on a lode worth 60*s.* and west on a lode worth 60*s.* per fm. The south lode, sinking below the 20, is improving, and the communication from the shaft, on the south lode, will shortly be made, when (as the agent says) the reserves on this lode, which are considerable, will become available. There are other points of importance, amongst which is the Turnpike shaft lode, now being developed. Since the last sale several tons of tin have been prepared ready for the smelting house. The last sale realised 58*s.* per ton; but as tin is advancing in value, about 60*s.* per ton will, no doubt, be realised for the next parcel.

EAST CARADON.—This mine continues to improve. In the week ending April 29 the aggregate value of the several ends was estimated at from 39*s.* to 42*s.* per fathom; last week they rose up to 45*s.* to 48*s.*, while this week they have reached 54*s.* per fathom, so that the expectations of success held out by Captain Seccombe are being steadily realised. The shareholder should remember Captain Seccombe's report at the recent meeting, in which he stated that the 80 east had opened up a lengthy and profitable piece of ground, better than in the 70 over, "and from the strong lode seen in the 90, together with the other points of interest in the sett still undeveloped, I consider our chances of discoveries for the future are very good." The dividends which this mine now pays give an interest of about 15 per cent. per annum on money invested in the shares at present prices.

GREAT SOUTH CHIVERTON is still exciting great expectations in the district, the miners who are watching its progress, with a knowledge of the features and indications which were first discoverable in West Chiverton, being, without exception, strongly impressed with a conviction that the great South Chiverton will prove to be as valuable a mine as that has turned out to be, and which there is good reason to believe will presently become much more valuable than it is at present.

THE GREAT DARREN MINE.—Notwithstanding the general practical mining business for the past quarter has been broken into by the frosty weather acting against the machinery, so much that a sale of 20 tons of ore, worth nearly 40*s.*, that would otherwise have been got to market, could not be realised, the accounts of this company show a clear profit of 100*s.* upon the working, which would have been made up to 600*s.* if the weather had proved practicable for dressing. It is not, however, so much to notice this as to point out the fact that the mine undoubtedly begins to make profit from a portion of the vein deeper than any part of it that has ever been seen up to this time. Another important consideration connected with the business of this great mine is that the incomings begin to over-balance the expenditure; this is a most momentous landmark in the progress of mines. We have noticed the neighbouring mine of Bronfloyd with some anxiety for the last 14 years struggling to get the balance on the right side of the scales, and sometimes have been almost disheartened as to its doing so. We should take a lesson in our faith on mining from such examples. About two years ago Mr. Balcombe and his friends at Bronfloyd made the first dividend; from that time to this his path has been pleasant to tread. We draw a similar inference with reference to the future of the Great Darren Mine. There is in this rich little out-of-the-way mining valley and its north-east contributory, Cwmsymlog, the rich, probable, ancient, and lasting mines, already in full operation, of Bronfloyd, the Great Darren, the East Darren, the South Darren, the Cwm Erbin, and the Bwlch Consolidated Mines, while several other mines in this locality hold discoveries of long lines of ore ground in the lodes, that cannot fail to be soon turned into profitable mines, it follows from these facts that the attention of miners cannot be too soon seriously directed to the unexplored silver-lead regions of Cardiganshire.

GREAT NORTH LAXEY.—From the report received this week, it will be seen that they appear to be on the eve of a most important discovery at the bottom of the shaft. If so, we may look for a great rise in the shares almost immediately.

THE ABERDARE SMOKELESS COAL FIELDS.—If one is to believe the reports from time to time as to the profits of the Aberdare Steam Coal Collieries, the modern El Dorado seems to have found its *locus in quo* in that "Happy Valley," or, as they say in Pennsylvania, our Welsh friends seem to have "struck oil." Private coalowners are realising incomes annually, which must make the Chancellor of the Exchequer's mouth water, as he calculates what the four pences derivable therefrom will "tolt up to." It is not to be wondered at that the Limited Liability principle should have invaded these lands of promise. This week chronicles another absorption. Following in the wake of Powell's Duffryn, the Blaenau, and others, the large Hirwaun Works, embracing collieries, blast-furnaces, rolling-mills, and all the etcetera of such undertakings, with the thousands of acres of coal and ironstone comprised in the mineral territories of Hirwaun and Rhigos, have passed into the hands of the Hirwaun Coal and Iron Company (Limited), of which the directors find one-half of the capital themselves, and doubtless they will have plenty of investors glad of an opportunity of joining them in an enterprise promising such great results, and having so little of the speculative element in its composition.

TOTAL GOLD PRODUCTION FROM 1850 TO 1863, INCLUSIVE:—

Old sources.....	£202,793,000
British Columbia	5,605,000
Australia and New Zealand.....	136,388,000
California and United States	142,200,000
Other countries	1,018,000
Total	£488,004,000

LAKE SUPERIOR COPPER.—The total copper product of Lake Superior in 1864, as per tables published in the *Mining Journal* and *Miner*, is 8561*t.* tons, producing about 6850 tons of ingot copper, worth \$6,850,000, and from each district as follows:—Keweenaw District, 2548*t.* tons shipped; Portage Lake District, 4292*t.* tons produced; Ontonagon District, 1722*t.* tons shipped—total, 8561*t.* tons. This amount would have been from 1500 to 2000 tons larger had it not been for a great falling off in the products of the Minesota, the scarcity of labour in some of the districts, and its employment largely in opening new mines.

COAL MARKET.—The fresh arrivals this week numbered 108 ships. For household coals the demand has been more active, and a complete clearance effected at an advance of 6*d.* per ton since this day week. Hartley's and manufacturers' in steady demand, at last week's currency. Hetton Wallsend, 18*s.*; Haswell Wallsend, 17*s.* 6*d.*; Braddell's Wallsend, 18*s.* 3*d.*; Russell's Hetton Wallsend, 16*s.*; Hartlepool Wallsend, 17*s.*; Heugh Hall Wallsend, 16*s.* 3*d.*; Tunstall Wallsend, 15*s.* 3*d.*; Hartwell Wallsend, 15*s.* 3*d.*; Hetton Lyon's Wallsend, 15*s.* 3*d.*; Unsold, nil; 40 hds. at sea.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, MAY 12, 1865.

COPPER.	s. d.	s. d.	STEEL.		Per lb.
Best selected...p. ton	92	0	0	—	Sheets 9 <i>s.</i> 4 <i>d.</i> —
Tough cake & tile	91	0	0	—	Wire 9 <i>s.</i> 4 <i>d.</i> —
Burra Burra	94	0	0	—	Tubes 9 <i>s.</i> 4 <i>d.</i> —
Copper wire	p. lb. 6	1	0	10 <i>s.</i> 4 <i>d.</i>	
Ditto tubes	0	1	1	—	
Sheathing & bolts.p. ton	85	0	0	—	Swedish, in kegs (rolled) 15 10 0-15 16 0
Bottoms	100	0	0	—	(Chamfered). 16 0-16 10 0
Old (Exchange)....	91	0	0	—	Ditto in faggots 16 0-16 10 0
					English, Spring 18 0-23 10 0
					QUICKSILVER (per bottle). 8 0 0 nom.
					SPELTER.
					Per Ton.
IRON.	Per Ton.				Foreign 21 5 0
Bars Welsh, in London.	7 12	6-7 15 0			To arrive 21 10 0-
Ditto, to arrive	7	7	6-7 10 0		
Nail rods	8	10	0-		
" Stafford, in London	8	15	0-9 15 0		
Hoops ditto	9	15	0-10 10 0		
Sheets, single	10	7	6-11 0 0		
Pig No. 1, in Wales....	4	10	0-		
Refined metal, ditto	4	0	0-5 0 0		
Bars, common, ditto	6	15	0-7 0 0		
Do., merch. Tyne or Tees	7	10	0-		
Ditto railway, in Wales	6	12	6-7 0 0		
Ditto Swed. in London	12	0	0-		
To arrive	13	0	0-		
					TIN.
					English, blocks 97 0 0-
					Ditto, Bars (in barrels) 98 0 0-
					Ditto, Refined 100 0 0-
					Banca 98 0 0-
					Straits 93 0 0-
					TIN-PLATES.*
					IG Charcoal, 1st qu. p. bx. 1 8 0-1 10 0
					IX Ditto 1st quality " 1 14 0-1 16 0
					IX Ditto 2d quality " 1 6 6-1 7 0
					IX Ditto 2d quality " 1 12 6-1 13 0
					IC Coke 1 2 6-1 3 9
					IX Ditto 1 8 6-1 9 9
					Canada plates, p. ton 10 10 0
					In London: 20 <i>s.</i> less at the works.
					Yellow Metal Sheathing...p. lb. 8d.-8 <i>s.</i> 4 <i>d.</i>
					Sheets p. lb. 8d.-8 <i>s.</i> 4 <i>d.</i>
					Indian Charcoal Pigs } 7 0 0-7 10 0
					In London }
					* At the works, 1 <i>s.</i> to 1 <i>s.</i> 6 <i>d.</i> per box less.

REMARKS.—From the tenor of the late intelligence received from America, there is very little doubt that peace will soon be established there; and immediately that is the case a considerable impetus will be given to the Metal Market, as in consequence of the almost total cessation of the shipments to America for some considerable time past, there must be a great want of metals there, which will have to be supplied from this country, and we may, therefore, look for a very considerable increase in the orders for metals from thence. We shall, therefore, hail the return of peace, not only on account of the stoppage of the frightful slaughter which has for so long a time been going on there, and the cessation of that destruction of property which has been devastating the land, and the return to peaceful employments of the large body of men who have been serving in the various armies, but also because of the great advantage which the trade of this country will receive thereby, and the hope that in due time there will be a return to those extensive commercial operations which formerly characterised our relationship with America. During the past week the metal market has exhibited a slight degree of improvement, orders are more freely given out, and in some instances prices have become firmer, and there is now every reason to hope that we shall ere long be enabled to record a much more satisfactory state of business in the metal trade.

COPPER.—The market for this metal has been quiet during the week, and prices have remained unaltered. Burrey may now be quoted at 94*s.*

IRON.—In Staffordshire the orders for finished iron are rather more extensive, and all the leading houses are in full operation. From the United

States a few orders have been received, and it is hoped that more will come ere long.

The exports of iron to that country in March last were very little over a fifth of the amount in the corresponding month of last year; there, however, appears a good prospect of a revival of activity in the trade. No doubt the North Staffordshire strike has something to do with the improvement, and as it seems likely to be over shortly it may somewhat check orders to the South. In Welsh, from continental and other foreign markets the demand continues good, and the prospects for the future are, upon the whole, encouraging.

LEAD.—No alteration in prices has occurred during the week, but the market is exceedingly dull, and transactions very limited.

TIN.—Business in foreign has not been very extensive, and the price of Straits remained at 93*s.* cash; for arrivals sales have been effected at 95*s.*

SPELTER.—This metal has continued to improve during the week, and extensive sales have taken place at advanced prices, and it may now be quoted at 21*s.* 5*d.* on the spot, and 21*s.* 10*d.* for forward delivery. The advance may probably continue for a short time, but when the spring shipments arrive, no doubt, prices will become easier.

ZINC.—An advance of 2*s.* per ton in sheet has been announced by the makers.

TIN-PLATES.—The late advance is maintained, and the works are better employed, in consequence of the impetus which the improved enquiry has imparted to the trade. Stocks are large in the hands of many of the makers.

STEEL still continues neglected.

QUICKSILVER.—But little business doing.</p

financial community with reference to the possibility of a further change in the rate of discount by the Bank of England has also exercised a damping effect—more so, indeed, than if the late rise to 4½ had at once been made to 5 per cent., with some assurance of a longer continuance of that rate, and there are not a few complaints on the part of monied men that the Old Lady of Threadneedle-street should, by her increased fickleness, keep them in a constant state of most uncomfortable flutter. So strong have all these adverse influences been for the last several days, that on more than one occasion we have had a complete blank, not only in the list of transactions in mining, but also in steam and miscellaneous securities, with a tendency in almost every case towards lower prices. Even the shares of the Wicklow Copper Mining Company and of the Mining Company of Ireland, so much the favourites of such buyers as prefer a small but safe percentage of dividend to prospects of much larger profits, coupled with the necessity of using some discriminative judgment, have within the last few days been ineffectually offered for sale at a small reduction in price. However, the solidity of the present condition and of the prospects of these companies is too well known and understood to admit of a doubt of a speedy return of more active business in their shares. The smaller description of shares suffered likewise, but not fully to the same extent. A small parcel of Carysforts was done at 12s. per share (2s. 6d. paid.) Par would be taken for the shares of the General Mining Company for Ireland, and 22s. for Connorees (20s. paid.) Other shares of mines or quarries have not even been alluded to.

THE PETROLEUM COMPANY OF WESTERN VIRGINIA (U.S.) is the title of an enterprise (with a capital of 200,000*l.*, in 20,000 shares of 10*s.* each, of which there will be a first issue of 10,000 shares) having for its object the development of the oil resources of Western Virginia, which, according to competent judges, are far superior to those of Pennsylvania, the oil being lubricating, and of greater specific gravity, and is more valuable for commercial and manufacturing purposes. It is proposed in the first instance to sink 15 wells: supposing that 10 only strike oil, and taking the company's interest at the low average of 15 barrels per day per well, there will be produced about 200*b.* worth of oil per day. It is computed that 25 per cent. of the value of the gross yield will fully meet every cost, in which case, assuming the above estimates to be correct, there will be left a margin of something like 54,000*l.* per annum, which is equal to 78 per cent. per annum upon the amount of capital (70,000*l.*) proposed to be at present called up. As an evidence that the above estimates as regards the daily yield of the wells are far from being exaggerated, it is mentioned that many wells in the United States are at present yielding from 500 to 1500 barrels per day, and that there are now in America no less than 342 companies for working petroleum, with a nominal capital of \$251,355,000, and that many of them are paying dividends of from 4 to 20 per cent. per month upon the capital subscribed. All the preliminary expenses incidental to forming the company are guaranteed to be defrayed for 2000*l.*

THE BRITISH, INDIA, AND COLONIAL TRUST AND AGENCY CORPORATION is the title of an enterprise shortly to be introduced to the public. Among other objects, it has in view the establishment of an improved system for the conducting of agencies and commissions, and a carrying trade of valuables and parcels to and from India and the colonies; also to form a safe depository for property and wills, for whose security and administration the corporation is to be responsible; and also to afford full, accurate, and unbiased information of every description respecting India and the colonies—information which at present is only obtainable with difficulty from offices scattered over London—from statistical documents and official papers, and from consultation with numerous persons who have resided in various parts of the empire. Although this contemplated work is already performed by private individuals, yet the necessity for such a well-organised enterprise as that now proposed to be formed is found in the fact that this description of business is daily increasing; also in the difficulty of ascertaining with what private agency property has been deposited, and in the permanent security afforded by a public corporation. It is urged that the commission charged upon such an amount of business as the company will transact will form (together with the other sources of income) a remuneration sufficient to afford satisfactory dividends. The first issue of share capital will be 100,000*l.*, in 5000 shares of 20*s.* each.

At Redruth Ticketing, on Thursday, 2433 tons of ore were sold, realising 12,717*l.* 10*s.* The particulars of the sale were:—Average standard, 122*t.* 7*s.*; average produce, 6½; average price per ton, 5*l.* 4*s.* 6*d.*; quantity of fine copper, 158 tons 13 cwt. The following are the particulars:—

Date. Tons. Standard. Produce. Price per ton. Per unit. Ore copper.

April 13... 2140 ... £122 12 0 ... £5 0 6 ... 15s. 10d. ... £79 6 0

" 20... 4419 ... 127 10 0 ... 55% ... 4 11 0 ... 15 11½ ... 79 6 0

" 27... 3175 ... 122 6 0 ... 62% ... 4 16 6 ... 15 7 ... 79 12 0

May 4... 3119 ... 121 12 0 ... 62% ... 5 8 6 ... 16 14 ... 80 13 0

" 11... 2183 ... 122 7 0 ... 62% ... 5 4 6 ... 16 0 ... 80 3 0

Compared with last week's sale, the standard has slightly declined. Compared with the corresponding sale of last month, the standard has slightly advanced.

At the Swansea Ticketing, on Tuesday, 1196 tons of copper ore were sold, realising 12,483*l.* 8*s.* The particulars of the sale were:—Average standard, 100*t.* 13*s.*; average produce, 12½; average price per ton, 10*s.* 9*d.*; quantity of fine copper, 151 tons. The following are the particulars of the sales during the past month:—

Date. Tons. Standard. Produce. Price per ton. Per unit. Ore copper.

April 11... 3048 ... £9 15 6 ... 193% ... £16 6 0 ... 16s. 10d. ... £24 2 3

May 9... 1196 ... 100 13 10 ... 123% ... 10 8 9 ... 16 6½ ... 82 14 0

Compared with the last sale, which was also the corresponding sale of last month, the decline has been in the standard 1*t.*, and in the price per ton of ore about 2*s.* 6*d.* Of the 1196 tons of ore sold on Tuesday, 1060 tons were British ores, which gave an average produce of 12, and sold at an average standard of 101*t.* 3*s.* 10d.—19*s.* 2*d.* per ton of ore; the remaining 136 tons were foreign ores, which gave an average produce of 17½, and sold at an average standard of 96*s.* 19*s.*—14*s.* 5*d.* per ton of ore. On May 23 there will be offered for sale 1453 tons of ore, from Knockmahon, Berehaven, Genon, Var, Casali, Victor Emanuel, Moonta, the Cape, and elsewhere.

At Frank Mills meeting, on Tuesday (Mr. W. T. Smith in the chair), the accounts showed a credit balance of 1638*l.* 17*s.* 9*d.* A dividend of 7*s.* per share was declared. Details in another column.

At East Wheal Grenville meeting, on Wednesday (Mr. Wells in the chair), the accounts for the quarter ending March showed a credit balance of 122*t.* 3*s.* and a balance of liabilities over assets of 589*l.* 4*s.* 2*d.* A call of 2*s.* per share was made. Captains Odgers and Bennetts reported they were of opinion that before the next meeting some two or three important points are likely to come off, and of which they have strong hopes.

At Grampian and St. Aubyn meeting, on Tuesday, the accounts for March showed a debit balance of 2017*l.* 8*s.* 6*d.* The loss on the two months' working was 359*l.* 3*s.* 1*d.* A call of 1*s.* per share was made. Capt. John Mitchell reported that their returns were gradually increasing, and, from present appearances, was likely further to increase.

At Wheal Jane (Kes) meeting, on Monday, the accounts to the end of February showed a credit balance of 272*l.* 4*s.* 3*d.* The loss on two months' working was 54*l.* 9*s.* 7*d.* Captas. Bray and Giles reported upon the various points of operation.

At South Mouth Mine meeting, on Tuesday (Mr. W. T. Smith in the chair), the accounts to date showed a debit balance of 1945*l.* 17*s.* 10*d.* A call of 4*s.* per share was made. Capt. J. P. Nichols and George Mauder reported that they hoped before the next meeting to have intersected and laid open the lodes in the 90, when, if their expectations be realised, they will be in a position to give a much more favourable report.

At the Great North Downs Mine meeting, yesterday (Mr. Pinner in the chair), the accounts showed a debit balance of 1659*l.* A call of 5*s.* per share was made. The report of the agent (which appears in another column) showed that the cause of the debit balance being so heavy was from the fact that the greater portion of the ore ground had been under water, arising from an accident in the country adit. It was explained that this accident had been rectified, and the cutting of the Wheal Rose lode in the 90 was daily anticipated; this would enable the agents to sink the eastern part of the mine 20 fathoms deeper, in a rich course of ore. The 80, at Wheal Rose, up to the boundary, was worth 50*s.* per fathom, and King's shaft was within 5 fathoms of this course of ore.

At the Great Briton Mine meeting, yesterday (Mr. R. H. McCallan in the chair), the accounts showed a debit balance of 876*l.* 17*s.* 10*d.* A call of 4*s.* per share was made. The report of the agent referred to the prospects of the mine as exceedingly good, having the lodes of North Treskerby and Wheal Rose running through the sett.

At Wheal Crebor general meeting, on Thursday, the accounts showed a cash balance in hand of 282*l.* 15*s.* 6*d.*, and an excess of assets, after all accounts were paid, of 3*s.* 1*d.* A call of 1*s.* per share was made.

At the Pendene Consols Mine meeting, on Tuesday (Mr. Bawden in the chair), the accounts for the three months ending with March cost showed a profit of 24*l.* 6*s.* 1*d.* The general balance sheet showed a credit balance of 98*l.* 2*s.* 1*d.* The report of the agents, which appears in another column, having been read, which referred to the improved position of the mine, a letter from Mr. White (the purser) was submitted, which stated that, according to the present prospects, the mine would pay its costs for the next three months, even with the present price of tin, but on account of the barren nature of the ground they could not venture to give any opinion as to the future. There was 60*s.* worth of copper dressed at surface. The Chairman said that the position of the mine had improved during the past three months, and he thought there was good ground for believing that a further improvement would soon be made. He need hardly say that there were very few progressive mines that could, with the present price of tin, show that the costs were more than met. There were now six men engaged in driving to cut the Great Pendene lode, and it was calculated that for those

men to get wages they must drive 18 fathoms in three months, in which case that lode would be seen during that period. Mr. Birdsey mentioned that Capt. Eddy had expressed an opinion that a rich lode would be found in the 154, which level was now being driven. Mr. Jeffrys asked if when the Great Pendene lode was cut some time since there was not such a great influx of water as to prevent the continuance of operations? Mr. Birdsey said that such was the case, but that the water was dammed back under the instructions and recommendations of the agents of the two adjoining mines (Botallack and Levant). Mr. Mocatta mentioned that in the 154 (corresponding to that now being driven in Pendene) all the riches in the Botallack and Levant Mines were found. Mr. Jeffrys thought it desirable that the south lode should be tested in depth as well as in the upper levels. The secretary (Mr. Cohen) said that two of the upper levels were being driven upon that lode, and a cross-cut was being put out at a third level, but he did not think they were yet quite prepared to drive the lower levels. The Chairman (in reply to an enquiry) said that the impression at the last meeting was that the cost of the ensuing three months would not be met by the returns, but, as he had already remarked, notwithstanding the low price of tin, that had been more than done. The report was ordered to be entered on the minutes, and the accounts were passed and allowed. The committee of management were re-elected.

At Roskernoweth Mine meeting, on Tuesday, the accounts for Feb. and March showed a credit balance of 38*l.* 8*s.* A call of 5*s.* per share was made. Capt. Vivian, Angove, and Hosking reported that the favourable point in this mine consist in driving west on the North Roskern main lode, and opening on the Parkbanow caunter lode at depths varying from that of the adit, which is about 12 fms. from the surface, to 70, which is about 80 fms. from the surface, and in being able to do so free from expenditure for drawing the water, which flows into North Roskern.

At North Roskern Mine meeting, on Tuesday, the accounts for February and March showed a debit balance of 1139*l.* 10*s.* 6*d.* A call of 1*s.* per share was made. The sum of 20*s.* per annum was voted to Capt. W. Thomas for land destroyed. Capt. Vivian, Angove, and Hosking reported that they are gradually increasing their quantity of tin, and should the price of this metal advance still further, they may stop ground now idle, and add considerably to their sales of tin, having now ample power on the mine to return a much greater quantity of tin than they are now raising.

At East Pool Mine meeting, on Monday, the accounts showed a debit balance of 398*l.* 7*s.* 6*d.* Mr. Abraham James was appointed underground night and day agent of the mine, at a salary of 10*s.* 10*d.* per month, and Capt. Maynard's salary is to be in future 10*s.* 10*d.* per month. In referring to the heavy amount of bills, and largely increased expenses at the mine, the committee state that the erection of the stamp-stamps and other costly machinery, rendered requisite by the great improvement in the tin ground, are now nearly completed, and in a very few weeks the operation of dressing will be resumed on so large a scale as to lead them to hope that it will not be found necessary to make any call, the future returns promising to be so considerable as speedily to reduce the debt, and give prospects of a resumption of dividends at no remote period.

At the Wentworth Consols Mine meeting, on May 5 (Mr. E. Burgess in the chair), the accounts from the commencement of the mine in March, 1864, to March, 1865, showed a credit balance of 2623*l.* 3*s.* It was stated that every charge on the mine, including engines, pitwork, &c., to the end of March was contained in the statement of accounts. All the required machinery being provided, in future the costs will be confined to the exploration of the mine, and the total expense is estimated not to exceed 300*s.* per month. The report of the agents (Capts. Jas. Juleff and Jas. Harris) stated that the new 60*t.* cylinder-engine, which has been erected, was of sufficient power to drain the mine to a considerable depth; there had also been purchased (and now on the mine) a steam drawing-engine, which would be got to work as soon as required. Good and substantial pitwork, and all other necessaries, had been fixed in the shaft so far as it has been sunk. The report concluded by stating that, taking a general view of the mine, from its situation and character, and from the composition of the lodes, the agents would hope and believed that it would prove to be a very valuable property, which would fully reward the shareholders for their outlay. It was parallel with the productive bearing parts of the rich lodes in West Chiverton Mine, and adjoins that seat.

At the Pennant slate Company meeting, on May 5 (Dr. W. E. Baddeley in the chair), the accounts showed a debit balance of 2611*l.* 7*s.* 3*d.* The directors' report states that the tunnel has been driven sufficiently far into the slate rock to warrant the roofing up, which is now commenced, and will take about four months to complete, after which they will begin to make slates. The top clearing has, considering the money spent (98*l.* 17*s.* 8*d.*), progressed very favourably, and everywhere indicates good slate. With reference to this, Mr. Robert Hughes reported that he had nothing to add to his former opinion, that the general appearance was most satisfactory. He strongly recommends them to carry on the workings at the tunnel in both directions, in order that they may have a better idea of the nature of the rock. In the meantime they can proceed more slowly with the topgaller. The directors have spent no money at present in machinery or in making tramways, being anxious to avoid every expense until they are positively required. The retiring directors were re-elected, and Mr. Pooler was re-appointed auditor at 3*s.* 3*d.* per year, including expenses.

* * * With this week's Journal we give a SUPPLEMENTAL SHEET, in which appears a Plan and Description of the Great Darren Mining District, North Wales—Silver Mines of Nevada: the Underground Workings—Alloys of Metallic Manganese—Extracting Gold from Sulphides—Gas in London—The Coal Question—Coal Basin of New South Wales—Vicinal Railways in France—Factory Chimneys—High-Speed Compressed-Air Hammer, &c., &c.

COPPER ORES. Sampled April 19, and sold at Swansea May 9.

Mines.	Tons.	Price per ton.	Purchasers.
April 29—Ile of Man Mining Co.	100	£26 2 6	J. & J. Williams.
May 3—Dylife	54	12 13 6	Newton, Keates, & Co.
—ditto	29	12 10 0	Walker, Parker, & Co.
—Minera	100	13 3 0	Sims, Willyams, & Co.
—ditto	100	13 6 0	ditto
—ditto	100	13 6 0	ditto
—ditto	28	13 1 0	Walker, Parker, & Co.
—ditto	100	13 6 0	Sims, Willyams, & Co.
—ditto	15	13 1 0	Walker, Parker, & Co.
—ditto	33½	13 6 0	ditto
—ditto	33½	13 6 0	Panther Co.
May 9—Ile of Man Mining Co.	100	14 13 0	Sims, Willyams, & Co.
May 11—Talsiach	150	13 15 6	Walker, Parker, & Co.
—ditto	150	14 10 6	A. Eytom.
Deep Level	15	12 13 6	ditto
Bryndwr Hall	5	13 0 6	Newton, Keates, & Co.
Rhosneigr	67	13 1 6	ditto
Parry's	18	13 15 6	Walker, Parker, & Co.
Bryn Gwlog	30	13 6 6	ditto
Pensant	8	13 10 0	A. Eytom.
ditto	2	14 15 6	Walker, Parker, & Co.
Trellogan	17	13 17 0	A. Eytom.
North Henblas	20	14 14 6	Newton, Keates, & Co.
Llanrigg United	41	11 18 6	Walker, Parker, & Co.
Roman Gravels	30	12 8 6	ditto
Nant-y-lago	8	11 6 0	ditto
Dyffrynwm	9	12 5 6	Newton, Keates, & Co.
Penrhyn Du	5	8 5 6	ditto
ditto	134	6 0 0	Walker, Parker, & Co.
Minera Union	50	13 1 6	A. Eytom.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
April 29—Ile of Man Mining Co.	100	£26 2 6	J. & J. Williams.	
May 3—Dylife	54	12 13 6	Newton, Keates, & Co.	
—ditto	29	12 10 0	Walker, Parker, & Co.	
—Minera	100	13 3 0	Sims, Willyams, & Co.	
—ditto	100	13 6 0	ditto	
—ditto	100	13 6 0	ditto	
—ditto	28	13 1 0	Walker, Parker, & Co.	
—ditto	100	13 6 0	Sims, Willyams, & Co.	
—ditto	15	13 1 0		

MAY 13, 1865.

WATSON AND CUELL'S MINING CIRCULAR.

WATSON AND CUELL,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.,
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Messrs. WATSON and CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon Mines and Mining, and the state of the Share Market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. Watson, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium published in 1843 Mr. Watson was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. Watson and Cuell have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share-dealing than there is at present; and, from the lengthened experience of Messrs. Watson and Cuell, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt, and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public, that they transact business in the public funds, railways, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are almost daily asked their opinion of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are enabled to supply shares in all the best mines at close market prices, free of all charges for commission.

MAN ENGINES.

The MAN ENGINE is a machine in use in a few of the deep mines in Cornwall, Saxony, the Harz, and Hungary, as well as in some of the deep collieries in Belgium and the North of France; but, although it was originally introduced in the Harz in 1833, the whole number of mines in which it has been adopted in Europe up to the present time probably does not exceed 30. In its original form, it consists of two vertical rods placed parallel to each other, and extending through the whole depth of the shaft; the heads of the rods are connected with the crank shaft of a rotary engine, by a long connecting-rod and two reversed angle levers, by which a reciprocating motion is imparted to them, one rod rising while the other is falling, and vice versa. A series of small platforms project from the face of the rods, the distance between them being equal to the length of the stroke. The miner wishing to ascend steps on to the lowest platform of one or other of the rods at the moment that it commences its upstroke, and is carried up during the time that the other rod is descending; at the moment when the rod stops at the change of the stroke he has arrived opposite to the next higher platform on the opposite rod, and stepping across to it he is lifted through the same amount before stepping back to the rod on which he started, and so on until he arrives at the top; the amount of lift during each revolution of the driving shaft being equal to twice the single length of the stroke in the shaft. In the newer forms adopted in Cornwall a single vibrating rod only is used, and the miner who is travelling up at the end of the stroke steps off the rod on to a fixed platform, and waits until after the next change; the rod again moves in an upward direction. In either case the method adopted in descending is the reverse of that adopted in coming up.

DOUBLE ROD CORNISH MAN ENGINE.—The rods are connected by link rods to the horizontal arms of a pair of levers, whose two limbs are bent at right angles to each other, which are supported on a braced timber framing placed above the mouth of the shaft. The ends of the vertical arms are firmly connected together by two flat wrought-iron rods. The motion of the driving crank is transmitted by a long wooden beam linked to the vertical limb of the left hand angle lever. The rods are guided by broad rollers of cast-iron, with projecting flanges at the sides in the model; these are placed alternately in front and at the back of the rods, which would necessitate changing the side on which the platforms are attached; this arrangement is not used in practice. A resting place or platform is provided at every 10 fathoms. The guide rollers are placed at 8 fathoms distance apart. The diameter of the path of the crank is 10 feet. Two double rod man engines have been built in Cornwall; the first was put up in the year 1843 at Tresevern, a mine which is now abandoned; the other, at the United Mines, was put up in 1845, and is still at work. The Tresevern engine was carried down to a depth of 290 fathoms; it was driven by a steam-engine of 36 in. diameter of cylinder, and 6 ft. stroke, making 15 revolutions per minute, which was reduced by spur gearing to one-fifth, or 3 strokes per minute on the rods; the latter were uniformly 8 in. square throughout. The speed at which the men were lifted was 72 ft. per minute, 24 minutes being required for the entire journey of 390 fms. The United Mines engine has the section of the rods tapered, varying from 7½ in. square in the upper 60 fathoms to 7 in. in the next length of 100 fathoms, and 6½ in. in the last 50 fathoms. The driving power is furnished by a steam-engine of 32 in. cylinder diameter, and 6 ft. stroke, which also works a pair of crushing rollers; the speed is reduced by gearing wheels to one-sixth of that of the engine, which runs at 18 revolutions per minute, the rods making three oscillations during the same period. The time required for travelling the whole distance of 200 fathoms is 17½ minutes.

MAN ENGINE AT HIMMELFAHRT MINE, NEAR FREIBERG.—This double rod engine was put up in the year 1857; it is driven by a water-wheel placed at the level of the adit, about 40 fms. below the surface, and extends to a depth of 190 m. (about 360 fms.) below that point. The rods are about 8½ in. square; the driving mechanism of angle levers and connecting rods being very similar to those of the double rod Cornish; the length of stroke is 5 mine feet, Saxon measure (about 56 inches). The guides on the rods are formed by projecting wrought-iron bars, which run between grooves of corresponding section in wrought-iron plates, screwed down to the cross timbers in the shaft, placed at intervals of 48 feet. Catch pieces are fixed to the backs of the rods at intervals of 18 ft.; they are pieces of cast-iron, with short arms projecting horizontally, which are intended to be received on horizontal cross bearers in case of any breakage taking place. An elliptical ring, with its long axis placed horizontally, fixed above each platform, serves as a handle. The rods are connected together at intervals by chains running on a cast-iron pulley or sheave placed between them. When this occurs, there is necessarily a break in the series of platforms, owing to the cross timbers which carry the bearings of the sheaves being in close contact with the face of the rods; at these points, therefore, the men have to leave the rods and travel by the ordinary ladder-way for a space of 24 feet; this inconvenience is common to nearly all the German forms of this machine. In the deep mines of the Upper Harz eight man engines have been constructed at different times; the earlier ones are made with double solid rods, but afterwards skeleton frames, made of thinner wooden bars, or wrought-iron rods, or ladders sown together with chains, were introduced; and in the deepest mine, the Samson shaft, near Andreesberg, the rods are entirely replaced by ladders, whose sides are made of tapered iron wire ropes, diminishing in thickness from 36 wires above to 2 at the bottom. It is customary in the Harz not to allow the men to descend by the engines, so that a continuous ladder-way is necessary. This is either placed between the rods or at one side of the shaft, in the usual way.

MAN ENGINE AT FOWEY CONSOLS MINE, CORNWALL.—This, the first of the single rod man engines, was built in the year 1851; it extends from the surface to a depth of 280 fathoms, the shaft being vertical throughout. The rod is 8 in. square, and is driven by an overshot water-wheel, of 30 ft. diameter, and 6 ft. face, making from 5 to 6 strokes per minute, the crank in the axle of the wheel being connected directly with the large balance bob at the surface by a round wrought-iron rod, 3½ in. in diameter. The bob in its turn is connected to the rod of the man engine by a similar wrought-iron rod, linked to a flat tail, and secured by wrought-iron strapping plates to a packing piece at the back of the rod. The beams of which the latter is built up averaging about 36 ft. in length; their ends are simply butted together, and the joint secured by long wrought-iron fish or strapping plates, placed in pairs opposite to each other on alternate faces, in a manner exactly similar to that employed in pump rods. The length of the plates is usually about 12 ft., giving room for eight bolts of 1½ in. in diameter. At intervals cross or T pieces are attached to the back of the rod; the end of these pieces run between grooves in two vertical timbers, 14 ft. long, forming guides for preserving the verticality of the path of the rod, acting in a similar manner to those of an ordinary horizontal steam-engine. The platforms are made of oak planks, 1½ in. thick, and 12 in. square, carried upon triangular wrought-iron brackets. Handles made of 3½ in. round iron are fixed 4 ft. above the platforms; they are plain staples, 2 ft. long, placed vertically, with the ends turned over at right angles, and driven into the iron. Similar handles are placed above the stationary platforms on which the men run during the alternate strokes; they are attached to a fixed vertical wooden rail. The excess weight of the rod is counterbalanced by three balance bobs, one of which is at the surface, and the other two are underground. The mass of the water-wheel not being sufficient to produce a sufficiently uniform velocity of rotation, a fly wheel, weighing 14 tons, has been added; it is driven by a gear wheel at three times the speed of the original engine. There are other single rod engines at Cornwall, at Levant, Dolcoath, Carn Brea, and Wheal Ruth. Of these, the first is 200 fms. long, making four strokes per minute; the second is 220 fathoms long, and makes 3½ strokes; the length of the stroke being, as is the case in all Cornish engines, 2 fathoms.

PREVENTING INCRUSTATION OF STEAM-BOILERS.—The composition, provisionally specified by Messrs. Sims and Pendley, of Shadwell, consists of powdered charcoal, common soda, and alum, which may be mixed in about equal parts, and then add to these matters wood dust, and mix the whole together. This will remove incrustation from old boilers, and prevent it in new ones.

THE PETROLEUM COMPANY OF WESTERN VIRGINIA, U.S. (LIMITED).

Incorporated under the Companies Act, 1862.
Capital £200,000, in 20,000 shares of £10 each.

First issue 10,000 shares.

£1 payable on application, and £1 on allotment.

No call to exceed £2, or to be made at intervals of less than three months.

DIRECTORS.

JOHN GROVE, Esq., Wellington-street, London. Bridge.

I. BRODERICK HARTWELL, Esq., Brunswick-terrace, Regent's-park.

FREDERICK SPENCER, Esq., Liddard's Wharf, Shad Thames.

D. FRASER LUCKIE, Esq., Ashley-place, Westminster.

JOSEPH H. TILSTON, Esq., Cheapside, Bayswater.

JOHN HORTON, Esq., Managing Director in America.

BANKERS—Bank of London, Threadneedle-street and Charing Cross.

BROKERS—Messrs. Spence and Norton, 22, Throgmorton-street.

SOLICITOR—George Lawrence, Esq., 9, Fenchurch-street.

AUDITORS.

Messrs. Chatterton and Nichols, Lawrence-lane, Cheapside.

LOWELL PRICE, Esq., Gresham-street.

SECRETARY—Courtney Clarke, Esq.

OFFICES,—9, GREAT WINCHESTER-STREET, OLD BROAD STREET.

PROSPECTUS.

The large returns upon capital invested in petroleum lands in America have induced the formation of the present company, that English capitalists may participate in the great advantages to be derived from these lucrative investments. The most competent judges affirm that the oil resources of West Virginia are far superior to those of Pennsylvania; the oil being lubricating and of greater specific gravity, is more valuable for commercial purposes. The directors, bearing in mind the fact that it is more desirable to purchase property where oil is known to exist and sink their own wells, rather than to purchase land upon which the existing wells may be partially exhausted, have entered into a provisional contract to purchase 300 acres in fee simple, together with the leases for fifteen years, at a royalty of one-fifth of the oil, of 510 acres situate in the counties of Cabell, Putnam, and Ritchie, for the sum of £51,000. The lands thus secured are in the heart of the petroleum district of Western Virginia, surrounded by oil wells, and all exhibit the best surface indications. Bubbling oil springs abound on them. They are also well situated as regards transit.

In consequence of the ready sale which is found for the oil at the well's mouth, the directors propose to partially adopt the American system of declaring dividends; and, therefore, after the wells are sunk, they have taken power by the Articles of Association to divide the profits every three months.

Oil is almost invariably struck in this region at depths varying from 150 to 250 feet. The rock being comparatively easy of excavation, wells are sunk at less than half the cost of the oil wells of Pennsylvania.

The directors propose to commence operations by sinking fifteen wells, and assuming that only out of the fifteen strike oil, and taking this company's interest at the low average of 15 barrels per day for each well, the yield will be 150 barrels per day, which at the selling price on the spot of \$10 per barrel, will be \$1500; or, deducting for exchange one-third—\$1000 in sterling; say £200 per day, or £9000 per month. If we deduct from this 25 per cent. for labour, wear and tear of machinery, management, &c., it leaves a margin of £54,000 per annum, or about 78 per cent. per annum on £70,000, which is the amount intended to be called up at present.

That the directors have not indulged in exaggerated statements, may be seen by the fact that many wells in the United States are now yielding from 500 to 1500 barrels per day, and it will be seen by Hillier's "Petroleum Recorder," that there are at present in America 342 companies for working petroleum, with a nominal capital of \$251,355,000, and that many of them are paying dividends of from 4 to 20 per cent. per month upon the capital subscribed.

The directors have secured the services of Mr. John Horton, of Birmingham, as managing director in America; the experience of Mr. Horton, extending over four years in this and other oil districts, renders this appointment very valuable to the company. All preliminary expenses incidental to forming the company are guaranteed to be defrayed for 2000L.

The company will from time to time acquire other lands or leases as they may be advantageously offered to them.

Prospectuses and forms of application can be obtained at the bankers, brokers, solicitors, and offices of the company, where the Articles of Association can be seen. Should no allotment be made, the deposits will be returned in full. Should a less number of shares be allotted than applied for, the deposits will be made available towards the payment on allotment, and the balance, if any, returned to the applicant.

THE PETROLEUM COMPANY OF WESTERN VIRGINIA, U.S. (LIMITED).

NOTICE is hereby given, that the SHARE LIST of this company will be CLOSED on THURSDAY NEXT, the 18th inst., for LONDON, and on FRIDAY NEXT, the 19th inst., for COUNTRY APPLICATIONS. By order,

COURTESY CLARKE, Secy.

Offices, 9, Great Winchester-street, E.C., May 13, 1865.

THE LLANRWST SLATE SLAB QUARRY COMPANY (LIMITED).

Registered under the Joint-Stock Companies Act, by which the liability of each shareholder is strictly limited to the amount of shares subscribed for.

Capital £75,000, in 15,000 shares of £5 each.

£1 per share, on application, and £1 on allotment.

Calls of £1 per share, at intervals of not less than three months.

It is not expected that more than half the capital will be called up.

DIRECTORS.

JOSEPH ATWELL, Esq., (Chairman of the Deal and Walmer Pier Company, and late Accountant-General of the Inland Revenue).

JOSEPH E. ALLEN, Esq., 9, New-road, Shepherd's-bush.

GEORGE DAVIES, Esq., C.E. (Firm of Messrs. Davies and Hunt), Searle-street, Lincoln-in-the-fields.

CAPT. FITZGERALD, 45, Upper Berkeley-street, Berkeley-square.

E. H. NOLAN, Esq., Ph.D. and LL.D. (Chairman of the Great Darren Silver-Lead Mining Company).

WALTER L. STRONG, Esq. (Director of the British Union Assurance Company).

THOMAS SHORT, Esq., 80, Lombard-street.

AUDITOR—Henry Schultz, Esq., Public Accountant, 11, Old Jewry Chambers (with another auditor to be selected by the shareholders).

BANKERS—London and County Bank, Lombard-street, E.C.; the Estates Bank (Limited), 156, Strand, London; and 6, D'Oyley-street, Dublin.

SOLICITOR—John Combs, Esq., 25, Bucklersbury.

BROKER—Charles Bennett, Esq., 2, Capel-court, Bartholomew-lane.

RESIDENT MANAGER AT THE QUARRY—W. H. Rawlings, Esq.

SECRETARY (pro tem.)—R. Walker, Esq.

TEMPORARY OFFICES OF THE COMPANY,—25, BUCKLERSBURY, LONDON, E.C.

Where prospectuses, with reports, may be obtained.

ABRIDGED PROSPECTUS.

The object of this company is to work a valuable self-faced slate slab quarry in North Wales. This quarry is so situated that 600 men or more can be advantageously employed on it at the same time. Each man will clear, raise, and rough-square ½ ton per diem.

There is no royalty whatever to pay. The parochial authorities purchase all the waste for repairing the roads. No promotion money will be paid.

The Articles of Association of the company contain no unusual clauses, and may be inspected at the solicitor's and company's offices, where specimens of the slate may be seen, and any further information obtained.

The slate from this quarry can be delivered at the railway and on board ship at such a cost as to leave a net profit of from 15s. 9d. to £1 7s. 6d. per ton, exclusive of all charges, and a slate merchant has contracted to take 400 tons or more per week for the next four years. Taking, therefore, the annual production of slabs at this quarry, when in thorough work, as low as 20,000 tons, it will be seen that it would leave a net profit of from £15,750 to £27,500 on the paid-up capital of the company, or over 50 per cent.

The directors recommend an immediate application to be made to the bankers for shares, who will have priority on allotment.

THE LLANRWST SLATE SLAB QUARRY COMPANY (LIMITED).—NOTICE.—The Directors have made such arrangements that enable them to GUARANTEE a MINIMUM DIVIDEND of TWENTY PER CENT. for the next four years.

By order of the Board,

R. WALKER, Sec. (pro tem.), 25, Bucklersbury, E.C.

THE BRITISH AND FOREIGN INVESTMENT.—MR. THOMAS SPARGO, STOCK, SHARE, AND MINING BROKER, 224, AND 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C., TRANSACTS EVERY DESCRIPTION OF BUSINESS IN THE PURCHASE AND SALE OF SHARES IN BANKS, CANALS, MINES, RAILWAYS, BRIDGES, INSURANCES, AND ALL OTHER DESCRIPTIONS OF BRITISH AND FOREIGN STOCK.

Mr. SPARGO has for sale shares in English mines paying from 10 to 20 per cent. upon the present price, in bi-monthly and quarterly dividends, as also a number of shares in good progressive mines, some of which he with confidence specially recommends to the public as sound investments.

Mr. SPARGO gives every information as to position and prospects of all mining undertakings, upon application, either personally or by letter, and is enabled, through his long experience, aided by his monthly visits to Cornwall, Devon, and Wales, to obtain the most reliable information as to the numerous mines in those districts. He will at all times give the best advice as to investment in mines, and, if necessary, inspect them himself; as in all cases he wishes to be guided by the intrinsic value of the property. Upon the receipt of 5s. he will furnish a selected list of dividend and progressive companies.

Mr. SPARG

THE MINING JOURNAL.

in the kingdom, the ironmasters have recently exhibited a very remarkable alacrity in adopting new ideas, and welcoming every reasonable improvement.

As the main purpose of these papers will be to deal with the commercial aspect of the subject, they will necessarily include a very full consideration of the conditions of the various markets through which the coal and iron produce of the kingdom passes into consumption. The trade of the leading coal ports will be carefully analysed, and its progress, fluctuations, and prospects discussed. The changes that have been already brought about, or are likely to be brought about, in the railway distribution of coal and coke, iron ores, and pig-iron, will be fully entered into. The increased application of Cannel coal, and other kindred mineral substances, to chemical treatment—particularly in the production of hydro-carbon oils—will, likewise, be found to have a growing importance in some districts. Coupled with these purely commercial matters, technical details will, also, receive full consideration, so far as they have a direct and immediate bearing on the cost of the winning and getting coal and ironstone—the manufacture of coke—the making of pig-iron, and its manufacture into wrought-iron, Bessemer metal (with its allied products), and steel.

A review of these matters will show a progress during the last twenty years that it would be difficult to parallel in any other branch of industry in this or any other country. The rapidity of the rise of the Cleveland and Ulverston district has rarely been equalled, even in America; and the technical progress of the metallurgy of iron during the last few years has been as great as possibly could be expected in a vast established industry. But whatever progress may have been made, it must be obvious to all who watch the signs of the times that both the coal and iron trades of the kingdom are still entering on new phases, that will task to the utmost the technical skill and business capacity of many of our oldest established districts to keep pace with home and foreign competition. In our some markets the effect of railways is yet far from being fully felt, and within the next ten years it cannot be doubted that they will bring about changes in the relative commercial positions of many of our coal districts.

Certain iron-making districts that hitherto have had a practical monopoly of the higher classes of manufactured and merchant iron now and themselves subject to a gradually growing competition from other districts, which, from the facilities afforded by railway communication, are able

readily to get any quality of pig they may require to work up; and some others, which although working with pig-iron of an inferior quality, have become formidable rivals, by having learned to overcome difficulties which a few years ago would have been considered insurmountable. But above all other sources of anxiety the labour question stands pre-eminent. Without writing one word that might tend to perpetuate any bitter feelings remaining from the struggle now (to a great extent, at least) over, nothing can be clearer than that the chronic state of ill-feeling that has of late been growing up between masters and men—particularly in the Midland districts—is pregnant with great future danger to our iron industry as a whole. Of course, this applies more or less to the whole of Great Britain; but a far better feeling certainly exists between employers and employed in the North than in the South. The only radical remedy seems to be to substitute largely mechanical appliances for manual labour. Thoroughly efficient coal-cutting machines, and some apparatus that shall enable us to dispense with, at least, the heavier portion of the labour of the puddlers, we the desiderata that we must now look for. It will probably be found that the districts foremost in successfully introducing these mechanical appliances will get a start in the race of competition that it will be difficult for those that allow themselves to lag behind readily to catch up. I do not wish to offer any opinion as to whether or not any of the appliances as yet brought before the public are really efficient. From the experience of invention, we all know how much time elapses, and how many abortive schemes are suggested, before any important mechanical application has been brought to a thorough useful practical bearing; but that ultimately machinery will be brought to bear on getting coal and puddling-iron is not, I believe, doubted by anyone competent to form an opinion on the question.

As to foreign competition in the supplying of foreign markets, although with an open field the British ironmaster might set it at defiance, it is well, under present conditions, not wholly to disregard it, particularly if the relations between labour and capital continue in their present unsatisfactory state. Still, while it is well to watch carefully the progress of foreign siderurgical industry, and not to treat it (as some of our ironmasters seem inclined to do) as an exotic absurdity, unworthy of serious consideration, we have certainly no reason to fear that foreign products will be able to prevent that extension of our iron trade abroad which is so necessary to the healthy expansion of that industry. The tendency of the times is obviously to equalise the rates of labour in various countries as intercommunication becomes easier and cheaper. As far as America is concerned this, of course, may be expected to tell against us; but, on the other hand, it must in time also tell against our continental rivals. The immense emigration from Northern Germany to the United States is gradually influencing the rates of labour; and as railway communications become more perfected, and with them the prices of the leading necessities of life become more equalised, a general advance in wages may be looked for in those portions of the Continent where the lowest rates have hitherto ruled. Our great advantage, of which nothing can deprive us, is the abundance, cheapness, and excellence of our fuel. With this inalienable natural advantage, we have only steadily to persevere in discovering and perfecting mechanical means for performing the great portion of the heavy work of getting coal and manufacturing iron, now done by manual labour, to place our iron industry in a position commercially unassailable for some generations. If, in addition to this, we steadily keep our metallurgical processes up to the advanced standard of sound practical chemistry, we can have nothing to fear from fair competition, come from what quarter it may. The competition of hostile tariffs no industry can, of course, struggle against; but as iron becomes more universally used, it is difficult to believe that any great country will be found deliberately to weight every branch of its industry by enhancing artificially the price of an article second only in necessity to food itself.

IMPORTS OF COPPER.—The imports of all descriptions of copper appear to have declined this year. Thus, in the three months ending March 31 the imports of copper ore were 12,781 tons, as compared with 14,188 tons in 1864, and 15,661 tons in 1863 (corresponding periods). The receipts from Cuba have increased this year; the arrivals from Cuba remained about stationary, but from Spain and other quarters the deliveries have fallen off. The imports of copper regulus to March 31 this year declined to 4,448 tons, as compared with 5088 tons in 1864, and 5631 tons in 1863 (corresponding periods). The arrivals from Chili in the first quarter of this year were only 3885 tons, as compared with 4165 tons in 1864, and 5125 tons in 1863 (corresponding periods). The arrivals of unwrought and partly wrought copper in the first three months of this year declined to 55,820 cwt., as compared with 90,200 cwt. in 1864, and 48,700 cwt. in 1863 (corresponding periods). The decrease in these imports was almost universal. Chili contributed, however, the largest portion of the decline, having sent us to March 31 this year only 35,820 cwt., while in the corresponding period of 1864 the receipts from the same quarter were 62,680 cwt. The value of the copper ore imported to Feb. 28 this year was 138,165£, while in the corresponding period of 1864 the value of the imports was 156,713£, and in the corresponding period of 1863, 129,843£. The value of the copper regulus imported in the first two months of this year was 83,114£, against 99,200£. in 1864, and 160,106£. in 1863 (corresponding periods).

RAILWAY DEBENTURES AND LLOYD'S BONDS.—We are in the middle of the session, and yet no action has been taken to carry out the recommendation of the Lord's Committee of last year for the establishment of a Public Office for the Registration of Railway Debentures, or for enforcing the registration of the irregular security known as Lloyd's Bonds in the books of the company the directors of which may have issued them. The financial improvidence which may result from this negligence on the part of the Legislature may be stated in a few words, and debenture holders ought to be alive to the situation. The holders of debentures are now registered in the books of the company by which the debentures are issued. This is under the provisions of the Companies Clauses Act, 26 & 27 Vict., c. 118, sec. 28. And so long as the engagements of the company are kept with the debenture holders the latter have no cause of complaint against the company. But the issues of Lloyd's Bonds are not registered; and, consequently, the debenture holder has no means of ascertaining to what extent the revenue of the company is pledged. The contingency may arise when a company may be in a position to discharge its obligations to its debenture holders, and yet not be in a position to meet all claims under the Lloyd's Bonds it may have issued. Under such circumstances the holder of a Lloyd's Bond could sue upon it, and there would be no defense to the action either legal or equitable, and judgment would be recoverable, and capable of being enforced either by execution against the effects of the company, or failing such effects against the shareholders to the extent of the amount unpaid upon their shares, or the judgment might be registered, and become a charge against the lands of the company. Now, it will at once be seen

that this process may be carried out with so much "diligence" that execution might be served before the holders of railway debentures could be fairly alive to the situation. Let us look to the remedy. Why, the application by the holders of not less than one-tenth of the total amount of debentures of the company for the appointment of a receiver (26 and 27 Vic. c. 118, sec. 25 and 26), and that not without the delay of the preliminary meetings which are inseparable from such proceedings. Yet we are coolly told, in the joint opinion of Sir Hugh Cairns and Mr. Lloyd, that, "in any conflict between the holders of these bonds and the holders of statutory debentures, it would, we apprehend, be practically a question of more or less diligence." The debenture holders and the holders of Lloyd's Bonds are thus placed under unequal conditions; and these conditions are to the disadvantage of the debenture holders. The attention of the Legislature should be at once drawn to this subject. Every day increases the difficulty. This is a question which not only affects debenture holders, but ordinary shareholder also; since by means of the creation of Lloyd's Bonds, a means has been designed by able counsel of intercepting the legitimate expectations of ordinary shareholders.

THE METALLIFEROUS MINES BILL.

It having been stated by Sir GEORGE GREY, in the House of Commons, that the majority of the members of the recent Royal Commission are of opinion that the objects in view would not be attained by any hasty legislation, the measure for the Official Supervision of Metalliferous Mines may be regarded as practically abandoned—at least for the present session. Sir GEORGE GREY expressed precisely the same opinion as has been given by the MINING JOURNAL upon every occasion since Lord KINNAIRD's bill was introduced—that those interested in mines should have an opportunity of expressing their views upon the subject. He repeated that which we have several times stated, that Lord KINNAIRD's object was to elicit the opinion of those interested. If mine agents and others whose position enables them to speak with authority upon the question, now neglect to make known their views they should not afterwards complain of legislation upon insufficient data.

In last week's Journal we published a report of Mr. JOHN TAYLOR's reference to the bill at the meeting of the South Minera Mining Company, whereat Mr. Taylor "went through the clauses of the bill, and showed how they would really work, and the evils they would inevitably entail." Now, we maintain, that it is such comments upon the bill as those referred to that should be widely published, and we shall be glad to devote space to the most complete exposition of the evils of the proposed bill, even to the extent of the refutation of its provisions clause by clause.

Since writing the above, we find that a Public Meeting of parties interested in the Mines of Cornwall has been convened, to be held at the Town Hall, Camborne, on Monday, to consider the provisions of the bill, and it is to be hoped that the fullest expression of opinion as to the manner in which the measure will operate will be given. The notice convening the meeting being signed by gentlemen and firms whose position as pursers, merchants, mine agents, or adventurers entitles their opinions to consideration, it may be hoped that ample data for the guidance of the legislature will be speedily obtained. The example so properly set at Camborne has already been followed at Liskeard, where a meeting will be held on Wednesday, and, no doubt, other districts will adopt a similar course.

MINING ASSOCIATION OF GREAT BRITAIN.

The annual meeting of this association was held on Tuesday last, at the Craven Hotel, Strand, Mr. NICHOLAS WOOD in the chair. The principal object of this society is the protection of the interests involved in the coal trade of the country, especially parliamentary business, with respect to coal bills and legislative enactments affecting coal mines. Amongst those present were the President, Mr. Wood, Messrs. Heathcote (North Staffordshire), John Lancaster (Lancashire), W. O. Foster, M.P., W. Williams, jun., W. Mathews (South Staffordshire), J. T. Woodhouse (Derby), the secretary, W. Day, and others. The treasurer's statement showed that of the call made three years ago, and which realised about 500£, only 27 remained in hand, while the Association owed sums amounting to upwards of 95£. On the other hand, South Wales, Northumberland, and Cumberland had not paid their contributions to the fund, nor did the representatives in those districts take any notice of the treasurer's application. Mr. Wood said that he felt himself to some extent personally responsible for the Northumberland subscription, and he at once gave a cheque for the amount, 143£, and would trust to the coalowners of the North to repay him. It was explained that, though the coalmasters in South Wales objected to pay their contribution, they had benefited from the protective action of the Association almost more than any other district. A resolution was passed to the effect that the gentlemen who had always represented the districts in question should assume a personal responsibility, and collect the money due from their neighbouring colliery proprietors. It was further resolved that another call be made, at the rate of 6£. 10s. per million tons of coal raised in any district.

A committee was then appointed to watch certain parliamentary matters, including Mr. Ayrton's Select Committee to enquire into the Complaints of the Miners of Great Britain; Mr. Cobbett's Select Committee on the present State of the Law between Masters and Workmen; Lord St. Leonard's motion relative to Strikes and Lock-outs; the Sewage Utilisation Bill; Railway Clauses Bill; Royal Railway Commission, &c. The following gentlemen were elected to form the above committee:—Messrs. W. Mathews, W. Williams, Lancaster, Fereday Smith, Woodhouse, Hewlett, Wood, Chambers, Horton, and Bean. After a protracted discussion on various points connected with the above subjects, votes of thanks were passed to the President and secretary, and the meeting was adjourned *sine die*.

GOVERNMENT INSPECTION OF COAL MINES.

In the House of Commons, on Tuesday, Mr. AYRTON, in moving for a Select Committee to enquire into the operation of the Act for the Regulation and Inspection of Mines, and into the statements contained in the petition of the miners presented to the House during the present session, said that it was not his fault, or the fault of the petitioners, that the motion had been deferred until now. It was necessary to proceed with the matter in committee as rapidly as possible. As the motion was unopposed, he would not trouble the House with any statement.

Sir G. GREY said a good many petitions had been presented during the present session from miners complaining of what they conceived to be some defects in the Acts for the regulation and inspection of mines, and he thought those complaints a very fit subject for enquiry. He doubted whether the committee would make much progress during the present session.

Sir J. Fenouillet thought a Royal Commission, which would have been able to visit localities and look personally into the matter, would have afforded a more effectual means of enquiry than a select committee. At the same time, he thought it would be very dangerous for the House to resist the demand made by so many persons engaged in the trade, and if no better result should arise from the enquiry than a proof that the claims of those persons were not overlooked the time occupied in the investigation would not have been lost. —Sir G. GREY said that a committee and commission were asked for, but he believed the preference was given to the committee.

Mr. A. SMITH wanted to know whether enquiry were to be limited to coal mines, or extend to different metalliferous mines?—Mr. AYRTON said the Acts mentioned only related to coal and ironstone mines, and the petitions were limited in the same way.

Mr. W. E. FORSTER regretted there was so little time left for going into the question. The case made out by the working miners was so strong that it was impossible for the House to resist the enquiry. He hoped the committee would sufficiently appreciate the strong feeling that existed on the part of these men to determine something should be done. It was very desirable that they should, if possible, make their report this session; but if that could not be done, they might recommend the Government to appoint a Royal Commission.

Mr. CHEETHAM believed it would be impossible for a committee to make a report this session, and he should, therefore, have preferred a commission.—The motion was agreed to.

THE METALLIFEROUS MINES BILL.—In the House of Commons on Monday, Mr. KINNAIRD enquired of the Secretary of State for the Home Department what steps he had taken, or proposed to take, to remedy the very serious evils which have been brought to light by the evidence taken by the Royal Commission appointed to enquire into the condition of mines, and which reported last session?—Sir G. Grey replied that the course which had been taken with respect to the report was?—It had been thought right to confer with the members of that Commission, several of whom were members of that House, on the subject. On many of the questions raised in that report it did not appear possible that any legislation could take place, but there were other points on which it might be expedient to legislate. He had accordingly called a meeting of the Commissioners at the Home Office, where the matter was fully gone into, and it was decided by the majority of members of that Commission that for the accomplishment of the object they had in view it was inexpedient that any hasty legislation should take place. It was necessary that the recommendations of the Commissioners with respect to the county of Cornwall specially should be more thoroughly discussed, and the opinions of persons interested in the mines in the locality obtained upon them. That opinion, however, was not shared by his noble friend (Lord KINNAIRD) at the head of the Commission, who had proposed a bill on his own responsibility; but for the reasons he had stated, the Government did not think proper to bring in any bill upon the subject this session.

NEW BORING MACHINE.—At the South Wales Institute of Engineers September meeting a paper was read by Mr. Mather on a new Boring Machine for sinking wells and shafts. From the description given much interest was excited in its mode of operation. The machine is now at work sinking a well for Messrs. North and Lowe, at the Brewery, Bute-bridge. A well had been already sunk 30 ft., but owing to it did not yield a sufficient supply of water, it was determined to increase its depth. As the bottom of the well was of hard stony

nature, mixed with clay, in some parts a solid bed of stratified rock, this, with manual labour only, would have been a work of great difficulty and danger. With the machine it is not only easy, but safe. The borer cuts the stone with much greater regularity than could be effected by hand, and by means of a pump attached, the broken particles of stone—some of them as large as a brick—are brought to the surface, and a new sphere of operation allowed for the borer. The machine itself is a marvel of ingenuity and skill—complex in its nature, but so simple in its operation as to be perfectly under the control of one man. Messrs. North and Lowe will be happy to show the machine to any person, and an inspection of the extraordinary manner in which it does its work will repay a visit from those likely to require such a machine.—*Merthyr Guardian*.

DRAWING COALS—IMPROVED PLAN.

Mr. ROBERT AYTON, F.R.S.S.A., read a paper at the Royal Scottish Society of Arts (Mr. Charles Cowan, President, in the chair) "On an Improved Plan of Drawing Coals, whereby great speed is attained with a small expenditure of power." The weight of the rope used in drawing coals absorbs a great part of the power employed. In deep pits for every ton of coals drawn there may be from 2 to 3 tons of rope drawn also. Various plans have been introduced for the purpose of reducing this waste of power, but with only partial success; and this has only been accomplished by making each cord during one part of its journey travel at a much slower speed than its neighbour, thus greatly lessening the quantity of coals raised; while at another part it travels at a high speed, thus greatly increasing the risk, and requiring the employment of increased engine power.

The proposed improvement may not at first sight appear promising, as it contemplates sending down the pit another rope, of the same weight and length as the one previously employed, by which means double the weight of rope will have to be put in motion for every ton of coal raised; but as one-half of this double rope is always descending while the other half is ascending, it will be seen that its weight is completely neutralised, and that at the expense only of the friction of the additional rope, which will be immediately seen to be trifling. The improvement, then, consists in hanging this additional rope by its two ends to the undersides of the two cages, and passing it under a pulley at the bottom of the pit to keep it in its place. The pulley is moved by a screw for tightening or slackening the rope. By this simple expedient pits whose great depth would require stronger and heavier ropes than could be worked on the present unbalanced system without a ruinous expenditure of power may be worked on the proposed system successfully, and that with engines of moderate power, for the entire weight of the ascending rope and cage is balanced by that of the descending ones, and the engine has nothing to do but to raise the coals and overcome the friction caused by the weight of the ropes, cages, and coals.

The author next showed the simplification which this system admits of. Instead of the lofty pit-head frame and its two pulleys, he places a single large pulley over the mouth of the pit, corresponding to the one at the bottom. The drawing-rope is to be passed over this pulley, and the cages are to be hung to its two ends. This rope connected to the lower rope by the two cages may be considered an endless rope, stretched between the two pulleys, and completely balanced in every possible position. All the working barrels, pins, fuses, &c., are to be laid aside, and their place supplied by a connecting-rod, driven by the engine. This sets the pulley in motion either way, and the pulley, by means of the friction between its surface and the rope, communicates motion to the rope and the cages with their loads. The paper shows the details of its application to a pit 300 fms. deep, in which 2 tons of coals are drawn at a time. It is then pointed out that the winding friction is the only unproductive work, and amounts to no more than 3 per cent., while 97 per cent. of the power derived from the steam-engine is productively employed. Besides the advantages derived from the balanced ropes, there are said to be others which result from the engine being connected with the drawing-rope by friction alone, in place of solid shafts or toothed wheels. If the engine is forced into violent action, which would endanger the rope on the old plan, it will merely cause the pulley to slip under the rope. If the cage should meet with an obstacle in the shaft the rope again slips on the pulley, and no damage is done. But the chief advantage occurs when the engine does not stop when the cage has reached the top of the pit. The result would be, under the present system, the dangerous accident of over-winding; but in the proposed system, as soon as the lower cage rests upon the bottom, and the rope and upper pulley are relieved from its weight, the friction is reduced *pro tanto*, and the pulley slips under the rope, and no damage whatever is done to the winding gear, or to the individuals who may be in the cage. As the slipping of the rope on the pulley prevents breakage in the shaft, a much higher speed than is considered safe at present can, says the author, be maintained. As there can be no over-winding, this higher speed may be maintained till the cage has almost reached the landing place; this is a saving of time. Again, the engine stops with the steam nearly full on, balancing the loaded cage; thus there is no occasion for shutters for the cage to rest upon, and the time wasted on them is also saved. From all these causes combined, a much larger quantity of coal can be drawn than is done by the present methods.

This system is supposed to be peculiarly adapted to the use of Safety-Cages. The screw which moves the lower pulley and tightens the rope at the same time compresses the springs of safety-cages, and keeps the clutches, or claws, clear of the guide-rods. This removes the only objection which is now urged against these useful machines, as it permits them to have powerful springs to overhaul the broken rope, without the possibility of their catching the guide-rods while the rope is entire.

REPORT FROM NORTHUMBERLAND AND DURHAM.

MAY 11.—The general trade of the district continues as reported lately—all the large works are well employed, both collieries and ironworks, the demand for raw and manufactured iron being good, with an excellent prospect for the future. The immense ironworks of Messrs. Abbott, at Gateshead, are being extended by the addition of large rolling-mills, and the necessary work for this purpose is now considerably advanced. The new establishment of Messrs. Hawks and Crawshay is now in full operation, the works are well laid out, and finished in the best style; they consist of puddling-furnaces and rolling-mills on a most extensive scale.

A dreadful occurrence took place at the Haswell Colliery, one of the underground boilers having exploded with great violence, causing the death of four persons, and serious injury to five others. The adjourned inquest was held on Tuesday, when several witnesses were examined, the most important being Mr. Storey, the engineer at the works; Mr. Murray, the eminent engineer of Chester-le-street; and Mr. Atkinson, the Government Inspector. Mr. Storey said that the boilers were worked at a pressure of 35 lbs. per square inch, and were always fed with hot water. He believed that the boiler had yielded at first about 3 feet from the bottom in a longitudinal seam, and also across the centre; the rent along the seam is about 9 ft. 6 in. The plates of the boiler are about 3½ in. nearly their original thickness. The quality of the plate seemed to have been good, but appeared to be somewhat crystallised by the action of the fire. Before the explosion occurred preparations were being made for erecting new boilers above ground, in order to get more boiler power.—Mr. Murray said he had inspected the boiler, and found it in two distinct pieces. There was nothing in the valves or floats to show what state they were in at the time of the explosion. There was incrustation at the bottom and sides of the boiler, and he believed that if it had been overheated that would have come off. His opinion was the explosion originated in a longitudinal seam through over pressure. He did not think there had been any perceptible defects in the boiler.—Mr. J. Atkinson, Government Inspector of Mines, presented a report, which spoke of the quality of the iron where the fracture took place being brittle. He also recommended that boilers after being 30 years in use should be discontinued. The jury returned a verdict of "Accidentally killed by a boiler explosion." The men who were injured by the explosion are all progressing favourably.

An explosion of gas occurred at the Blaydon Main Colliery, by which three men have been killed. An inquest was held on two of the men at Swalwell, on Saturday, and on the third man, who died in Newcastle Infirmary, on Tuesday. The result of the investigation was that it was shown that Allen was at work getting coal, on Thursday, in the Five-quarter Seam. He went to his work by the regular route, but on leaving he took another direction, and got into the old workings, where some gas had collected, and this gas ignited by his candle. When the workings he had strayed into were in operation, two years ago, a small blower was met with, and the gas, it appears, is still given off at this blower. The drift giving access to these workings was only holed twenty-four hours previous to the explosion, and positive orders were given that no one should go into the workings referred to. The coroner said that Allen, having gone into a place with a naked light where he ought not to have been, and causing an explosion, by which two men had come to their deaths, he was as culpable as the owner of the colliery would have been had their deaths occurred through his neglect or mismanagement. He did not think, however, that any good purpose would be served by returning a verdict of manslaughter against Allen. The jury returned the following verdict:—"That John Clavering died on the 4th instant, by falling down the staple, in consequence of the Hagan Pit firing; and W. Hippie died on the 5th inst., from injuries received by the said explosion, that explosion having been caused by Patrick Allen, going with a naked light into the north slate-stone coal seam, contrary to orders. Allen has, since that time, died in the infirmary, and an inquest has been held before Mr. Hoyte, the coroner; Mr. Dunn, the Government Inspector

[MAY 13, 1865.]

on Tuesday, charged with leaving their employment at the Sheriff Hill Colliery, not having given due notice of the same. The men pleaded the state of the pit as to ventilation, &c., as an excuse for leaving, and some witnesses were examined, who gave evidence as to the state of the pit, alleging that it was frequently unworkable, owing to the presence of foul air—that is, carbonic acid gas, or stythe, as it is called by the pitmen. Mr. A. Ross was also examined as to the state of the pit, he having inspected the workings, under the instruction of Mr. M. Dunn, the Government Inspector. A report was read by him, which stated that the ventilation is very defective, the airways being deficient in size, and the doors for guiding the air round the workings single instead of double. The furnace is also of small size, and very inefficient, the whole quantity of air, as measured by Biram's anemometer, being 5500 cubic feet per minute. This quantity being divided into three portions in the workings. At the same time the witness referred to, Mr. Ross, thought that on the day he examined the pit, there was no actual danger. The magistrates ruled that the case against the men was fully proved, they having left their employment without giving notice, and that the pit had not been proved to be in a dangerous state. At the same time they told the men that if they considered the pit to be in an unsafe or improper state, the proper course for them to take was to get the assistance of the Government Inspector, and, by enforcing the Act of Parliament, compel the owners to put the works into a proper state. The men were then sentenced to one month's imprisonment, with hard labour.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

MAY 11.—The improved demand for iron, previously noticed, still continues, and with very few exceptions the works are well employed. There is a degree of anxiety as to the permanence of this state of things, and it is felt that unless the United States renew the orders which have been so long withheld, a brisk trade can scarcely be anticipated. A few orders are given out for the country, but they are of small amount. Prices are decidedly firmer. Pig-iron is also stronger. Several of the makers are asking 2s. 6d. per ton more, though it is given in few instances as yet. The Hardware Trades of Birmingham and South Staffordshire are only moderately active. The foreign orders are, as a rule, small, and generally there is a disposition to purchase on a limited scale. The Chain Trade has been suffering from a long-continued strike. One of the masters, however, has agreed with his men—he separating himself from the rest of the makers, and the men renouncing all connection with the Union, and entering into an agreement to work at prices which split the difference in dispute, for two years. This agreement is one well worthy the consideration of those who are revolving in their minds the question of the prevention of strikes. One means towards that end is pretty clearly, longer engagements between masters and men.

The North Staffordshire strike is not over, as it was hoped it would be. The accounts which appear in the papers are derived now from the men and now from the masters, and the public find it difficult to discover the kernel of fact in the accumulation of assertions and loose statements. It is, however, clear that the Brierley Hill Executive has offered to make a levy of 2s. 6d. a week on the members of the Union in South Staffordshire if those in North Staffordshire will remain out, and hence a meeting called for Monday evening, and which was expected to have terminated the strike, was not held. The result is to give new hope to those on strike. There is, however, a continuous increase in the puddlers at work, in spite of this promise of augmented support, and it is impossible to say where or when the dispute is to end. The proposals for the promotion of emigration are still put forward, and it is stated that a large party will leave for New Zealand on the 17th. Another party is to sail for the United States, which looks a somewhat rash adventure, seeing that the great armies there are about to be disbanded, and their rank and file thrown on the labour market.

Strikes are more and more the order of the day. At Wolverhampton the bricklayers are asking for 2s. per week advance, and several other advantages. The masters offer to give the advance if the men will work by the hour, but for this they want 1s. 8d. per week extra, and a strike is the result. The labourers are asking for a like advance; and the painters are making a similar demand.

REPORT FROM MONMOUTH AND SOUTH WALES.

MAY 11.—The ironmasters of this district are fairly off for orders, and the animation referred to last week has, if anything, increased during the last few days. Confidence is being gradually restored in the American trade, and in another month or six weeks makers expect to be able to judge whether they may rely on a large demand from the States before the close of the year. Should the country settle down quietly, it is clear that an immense quantity of railway and other iron will be required to replace the destruction caused by the war, and there is little doubt that a large portion of the supply will be procured from South Wales. Shipments on Russian account have commenced, and there are several important orders in course of execution at the different works of the district for that country. There is a good enquiry for bars from home buyers, and prices are stiffening. The following are the average quotations:—Rails, 6s. 17s. 6d. to 7s. 5s. at the works; and bars, 6s. 7s. 6d. to 7s. 15s. Improvements and alterations are being carried out at Hirwain, previous to the new company taking possession. Messrs. Wayne and Co. contemplate adding a plate-mill to their already extensive and compact works at Glynllifon, and the Abernant Company are making arrangements with the view of increasing the make. In tin-plates there is a considerable business doing, and the advanced quotations are maintained without difficulty. Steam coals command a moderate sale, the export demand being still below the average. For house qualities there is a fair coasting enquiry, but the decrease in the local sale has necessitated a reduction in the output at some of the collieries.

The rather unfavourable report of the referees has induced the Bute trustees to withdraw the Bute Dock bills for the present session; but in doing this by no means abandon the idea of providing increased dock accommodation for the port of Cardiff.

A report has been circulated during the last few days that there is a likelihood of the Llanelli line passing into the hands of the Great Western either by lease or purchase. Should the report prove correct, the Great Western will secure a valuable railway property; for although it has not hitherto been a good paying one to the shareholders, yet it is clear that it has a decidedly encouraging future in store. Once the line is in the hands of the Great Western, the latter will completely command the trade to and from the rapidly rising port of Llanelli, and it would be well for the freighters of the neighbourhood to take care that proper facilities for an extended trade should be secured previous to the expected amalgamation.

At the Pontypool Petty Sessions, on Saturday, four workmen employed at the Blaenavon Works were summoned for neglecting their work. Mr. Cathcart, who appeared for the Blaenavon Company, stated that the complainants had determined to withdraw the summonses, and, therefore, there would be an end to the case. Mr. Roberts, of Manchester, who represented the defendants, desired to address the magistrates, but the latter declined to hear him as the summonses had been withdrawn. After the proceedings in the Police Court Mr. Paton, the manager, Mr. Roberts, and several of the men met, and it is satisfactory to add that the result was an arrangement which put an end to all disputes. It appears that the men refused to work in consequence of a belief that they were supplied with more than a fair proportion of white iron, which, from its being inferior in quality, is more difficult to be worked up.

RIGHTFUL COLLIERY EXPLOSION AT DOWLAIS.—Another of those direful calamities which are of such frequent occurrence in the colliery districts of the kingdom happened at the Vochrie Pit, the property of the Dowlaus Company, on Wednesday morning. It appears that a number of colliers had gone down as usual in the morning, and they stood together in a group in some part of the workings for a short time. The fireman, who had been round visiting the workings, placed the usual danger mark outside on heading, in consequence of an escape of gas, but one of the men, with an unaccountable recklessness of his own and others' lives, went into the heading, despite the warning posted up. It is said that he commenced brushing the gas out, and the result was a dreadful explosion, which scattered everything within its reach. Seventeen men were more or less injured, and one has since died, and four are in a state that gives little hope of their recovery. It need hardly be added that the medical gentlemen of the neighbourhood have been most assiduous in their attendance on the sufferers. From the manner in which Mr. Overton, the coroner for the district, always discharges his duties, there is no doubt that a searching enquiry will be made at the inquest as to the cause of the explosion. This is the first explosion that has occurred at the Dowlaus Company's collieries within 18 years.

TRADE OF THE SOUTH WALES PORTS.—The returns for the month of April have just been issued, and show a falling off in some instances. The coal exports were as follows:—

	April, 1865.	April, 1864.
Cardiff	Tons 107,006	Tons 190,847
Newport	24,607	23,709
Swansea	47,668	47,636
Llanelli	18,320	13,927

The shipments coastwise were as follows:—

	April, 1865.	April, 1864.
Cardiff	Tons 77,487	Tons 76,309
Newport	48,517	47,774
Swansea	24,171	24,251
Llanelli	24,812	26,894

The falling off in the exports of Cardiff was mainly attributable to two causes—a slight decrease in the demand, and a scarcity of tonnage. Newport is the only port that shows an increase in both the export and coasting trades, and it is evident from the returns for the last six or nine months that Newport is gradually recovering its lost ground. An average trade was done at Swansea, and Llanelli made a considerable stride in the exports; the slight falling off in the coasting shipments arose entirely from local circumstances, and not from a decrease in the enquiry. Cardiff also exported 10,158 tons iron and 2540 tons patent fuel; Swansea, 1832 tons of iron, and 6406 tons of patent fuel; Newport, 6619 tons of iron; 2150 tons of iron were shipped from Cardiff to New York and Baltimore, which is a considerable increase over previous months. A large Russian trade was done at Newport, and shipments of railway iron continue to be made to the South American Republics.

Judgment in the very important case of Prothero and others v. the United Merthyr Colliery Company has been decided in favour of Messrs.

Prothero—the company consequently pay £3,500. The facts of the case were these:—In the sale made to the company by Messrs. Prothero, 24 railway tracks, a course of purchase from a rolling-stock company, were included, and one of the arbitrators valued them irrespective of the instalments due upon them, whilst the other stated the value upon the assumption that the purchaser was to pay the remaining instalments—the consequence was a difference equal to almost the entire value of the trucks. The company claimed the trucks, free of further charges upon them, for the smaller amount, and to prevent difficulty with the rolling-stock company, Messrs. Prothero paid the remaining instalments, and now sought to recover the amount so paid from the colliery company. At the Bristol Assizes, before Mr. Justice Byres, Messrs. Prothero obtained a verdict for the full amount, which was appealed against, and the Court of Queen's Bench in Banco now confirmed the verdict. Mr. Justice Blackburn (L.C.J., Blackburn J., and Mellor J. on the bench) said that the apparent inconsistency of the two valuations was, he said, explained by the prior contract with the rolling-stock company, and as, in point of fact, the plaintiffs, Messrs. Prothero, had paid up the instalments remaining due from them to that company, and had thus become absolute owners of the trucks, they were entitled to recover the full amount of the larger sum on the footing of their present value without reference to that contract. There was no reason to disturb the verdict, and the Court, therefore, ordered that the rule to alter it be discharged.

SWANSEA.—The following arrivals of vessels with cargoes of minerals are the largest ever imported in one week into this port:—Stalne Castle, from Cuba, with 555 tons copper ore and 64 tons copper regulus, for the Cobre Mining Company; Magellan, from San Francisco, with 49,952 lbs. quicksilver and 43 tons copper ore, for Richardson and Co.; 677 tons copper ore, 56 tons silver ore, and 40 packets gold and silver bullion, for T. Wood and Co.; Atossa, from Caldera, with 520 tons copper regulus and 185 tons copper ore, for H. Bath and Sons; Zehlina, from Coquimbo, with 695 tons copper regulus, for H. Bath and Sons; Charlotte, from Havre, with 80 tons iron ore, for the Swansea Gas Company; River Wear, from Chanaral, with 800 tons copper ore, for Richardson and Co.; Atossa, from Caldera, with 520 tons copper regulus and 185 copper ore, for H. Bath and Sons; Rondimda, from Hondeklip, with 187 tons copper ore, for Richardson and Co.; John Knox, from Wallaroo, with 300 tons copper ore, for Richardson and Co.; Admiral Filizot, from Caldera, with 556 tons copper regulus, for H. Bath and Sons; Caldera, from Caldera, with 594 tons copper regulus and 100 tons copper ore, for H. Bath and Sons; Mangastene, from Huasco, with 610 tons copper regulus, for H. Bath and Sons; Hermensi, from Avorio, with 173 tons copper ore, for Richardson and Co.; Scout, from Coquimbo, with 634 tons copper regulus, for Richardson and Co., and 32 tons copper in bars, for H. Bath and Sons; Charles Jackson, from Cobija, with 380 tons copper ore and 170 tons silver ore, for H. Bath and Sons.

REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

MAY 11.—The tone of the Iron Trade this week is decidedly firmer, but the improvement has not been such as to influence any rise in prices. There are some good orders in hand for plates for shipbuilding, bars, and railway iron, and the effect upon the trade occasioned by the late strike appears to be gradually dying out. There are several firms entirely full of orders for manufactured iron, and they refuse orders, except with the condition of time attached. The pig-iron market is firm, and prices are tending upwards. The Coal Trade is in a very healthy condition, and, considering the period of the year, an actual briskness prevails, which keeps all the collieries at full work, and maintains a general firmness in rates. Should fine weather supervene we shall have a diminution of the demand, but the orders from the manufacturing districts prove that the cotton and woollen trades are in a much better position now than at any time since the American outbreak. There has been nothing doing in regard to the lead mines of Derbyshire during the past few weeks. Mill Dam is about to have another measure of ore, but it is reported that it will scarcely equal the last.

The enquiry into the deaths of eight persons who were killed in one of the Clay Cross Coal and Iron Company's pits was resumed on Tuesday. Richard Wilson (deputy viewer) desposed that on the morning of May 3 he discovered that there had been an explosion of fire-damp in the pit. The doors were blown open, and the dead bodies of eight miners were found near the engine-flats. In the stall where the explosion took place he had discovered a large crack in the floor, 17 or 18 yards long, and 2 ft. deep. He believed that the gas came out of that crack and was blown on to the naked lights of the men. He had never known before that gas issued in any quantity from black shale coal; the gas could not have proceeded from any other place. Hosea Marriott (engine-man) said he was attending to the engine when the explosion took place. He first heard a report almost like thunder, which subsided for a second or two, and after that he heard another report, and saw a flash like lightning in the pit mouth. The lights in the engine-house were put out, and the shaft and ropes injured. Mr. Evans (Government Inspector of Mines for the Midland District) said he thought the gas burst through the floor from some inferior coal below. Owing to the large quantity of air in the pit, the escape of gas must have been of an unusual character. No ordinary amount of ventilation could have diluted it. It was the general custom of the country to work black shale coal with naked lights. He thought an important question arose for future consideration, as to whether locked safety-lamps ought not to be used in this district. The Coroner having summed up, the jury found "That the deceased persons were accidentally killed by an explosion of gas."

FOREIGN MINING AND METALLURGY.

In Belgium the local forgemasters have shared contracts for rails, &c., just let on account of the State system of railways. The lowest tender was 6s. 15s. 8d. per ton. The tendering was as follows:—M. Sabatier, Monceau-sur-Sambre, one lot 6s. 15s. 3d., and one lot 6s. 16s. 9d. per ton; M. Smits, Couillet Company, one lot, 6s. 15s. 6d. per ton; MM. de Dorlodot Frères, Aclez, two lots 6s. 15s. 10d. per ton, and four lots 6s. 16s. per ton; MM. Biondauts and Co., of Thyle-Château, one lot at 6s. 15s. 6d., and one lot at 6s. 18s. per ton; and M. Devries, Châtelineau Company, one lot 6s. 15s. 6d., one lot 6s. 16s., one lot 6s. 17s. 5d., one lot 6s. 16s. 11d., one lot 6s. 18s. 3d., and one lot at 6s. 18s. 5d. per ton. The quantity of rails required was six lots of 500 tons each, besides considerable supplies of accessory material. The state of the Belgian iron market has been a little improved by the arrival at the works of several orders for merchants' iron for the interior; this arises, it is stated, from the confidence which purchasers entertain of an early improvement in quotations. It is hoped, of course, by Belgian metallurgists that this anticipation may prove well founded. The position of the Belgian coal trade continues satisfactory, stock are nowhere important, and frequently they are not found at all. Prices remain by continuation at their former point. A question which continues to pre-occupy Belgian colliery proprietors is the want of labour, which makes itself felt more and more. The deliveries of coal in the Mons basin continue particularly good, the French works of the Moselle, the Meurthe, and the Haute-Marne, preferring the Belgian to Prussian coke. The financial position of the Esperance Company shows some improvement. The extraction and fabrication accounts for the past year show a profit of 26,8907, from which 16,9871 was deducted for general expenses and banking accounts. The difference of 99037 was applied to the balancing of the accounts of 1863. The dividend of the Vieille-Montagne Company for 1864 has been fixed at 10s. per cent of a share; of this dividend half became payable on Wednesday, and the remainder will be distributed in November. We shall review the position of this important enterprise more in detail.

The tone of the foreign copper markets has experienced no sensible modification. At Amsterdam, Drontheim has made 57 fls.; English, 52 fls.; and Swedish, 56 fls. At Rotterdam, Drontheim has made 57 fls., and North American 53 fls. At Havre, Chilean and Peruvian, in bars, has brought 85s.; Peruvian mineral (pure standard), 84s.; United States (Baltimore), 72s.; ditto (Lake Superior), 95s. to 102s.; Mexican and La Plata, in bars, 74s. to 76s.; Russian, 92s. to 96s.; old yellow copper, 84s. to 82s.; red ditto, 84s. to 86s.; bronze, 72s. to 78s. At Antwerp, American has been quoted at 108s. At Paris the quotation necessitated by consumptive requirements, the demand for lead is almost nil on the markets of France and England; on the other hand, on some German markets, and especially at Hamburg and Berlin, some rather important sales have been made, so that holders now stand out for higher terms. At Antwerp, Belgian has made 19s. 16s. to 20s. 8s. At Rotterdam, Stoiberg has made 10s. 4s., German 10s. 4s. to 10s. 6s. At Amsterdam soft lead has made 12 fls., and Stoiberg 11 fls. At Paris, Spanish sausages have made 22s. 12s.; French, 20s. 12s.; Belgian, 21s. 12s.; to 21s. 14s.; and rolled, 22s. 8s. per ton. At Havre, Spanish has made 19s. 4s. to 19s. 12s. per ton. With regard to tin, advices from Amsterdam observe:—"Under the influence of the very important news received from America during the past month, the position of the lead market has very much improved. The price of tin, which did not display any variation during the first fortnight of April, rose on the reception of the American news to 58 fls., and some purchases on speculation, or effected to cover former sales, made it rise to 60 fls. This price, allowed for small lots, gave way to 55 fls., again rose to 60 fls., and fell once more to 59 fls. The market is now firmer, so that we may quote the article at 59fls. to 60 fls." Annexed are particulars of the stock at Amsterdam:—

	1865.	1864.	1863.
Stock March 31	Ingots 48,050	..... 55,098	..... 41,099
Deliveries in April	5,660	..... 6,377	..... 4,638

	1865.	1864.	1863.
Stock April 29	42,390	45,721	39,452

The stock for the approaching sale was estimated, April 30, 1865, at 163,201 Ingots, as compared with 119,475 Ingots in 1864, and 101,325 Ingots in 1863. Banca has been better served at Cologne and Antwerp; at Berlin it has remained quiet; at Paris it has been firm. At the latter centre it has made 103s., while Detroit has been quoted at 99s., and English at 95s. per ton. At Havre, Banca has made 95s. to 96s.; Detrit, 91s. to 92s.; Peruvian, 74s. to 82s.; and Peruvian mineral, 40s. to 44s. per ton. There has been little animation in zinc at Paris, but prices have been firm, rough Silesian having made 22s., and zinc from other sources 21s. 8s. per ton. At Hamburg the market has not been quite so firm. At Breslau, on the contrary, the situation is good, and prices have been quite sustained.

Pig appears to have regained a little favour in the Haute-Marne. At St. Dié the sale is mentioned of two lots of pig disposed of in the last few days of April at an improvement on preceding rates. One of these lots was 50 tons, and the other 100 tons. The rates and conditions of these affairs bring pig to 4s. 12s. 6d. and 4s. 13s. 9d. per ton at St. Dié. On the other hand, the quotations current for iron are without variations, rolled making 8s. 12s., and hamered 10s. 8s. per ton. A better future is anticipated in the Haute-Marne, and some works are increasing their engines and means of production. Among other improvements which are being carried out, we may mention that the Franche establishment will shortly put in activity new rolling works for the manufacture of plates for constructive purposes. Franche, which is situated on the Marne, is a small establishment, which has heretofore possessed only one blast-furnace, and but limited resources. The same progressive movement has appeared in the Meurthe in works which form part of the Moselle group. At some few leagues from Nancy, the Frouard establishment, which possesses already two blast-furnaces working casting pig, is about, it is stated, to mount a third. If we may judge from the importance of cargoes which have lately left the works by canal, and from their addresses and destinations, the sale of the products of the establishment must have a considerable extent. They are forwarded as far as Toulouse, and the Frouard, Champigneulles, and Pont-a-Mousson Companies appear to be taking a correct course in seeking to create an eighth blast-furnace within their

radius of twelve miles, in which works enjoy the advantages of mines of iron, coal, and lime. Cox-made pig for refining makes in these works 31, 2x, 6d. to 34, 4s. per ton. The neighbourhood of Longwy the completion of works is being actively pushed forward. M. L'Abbe will have a furnace in operation next month; the furnaces of the Providence Works has been commenced; and the Marquis de Lamotte is continuing the transformation of the two works which he purchased at the Hesrange undertaking. The dividend of the undertaking is known as the Provost Chantiers de la Méditerranée has been fixed for 1864 at 4s.

same the Russian Government no longer retains any hold on the mines, but throws them open to private speculation.

As to the profits of mining in this district, it will be better to mention a special instance, in which a piece of ground was tried, 60 fms. long and 40 fms. wide. The overburden of this piece was 160 cubic fms., and the sand to be washed was 120 cubic fms. The time required to conclude the undertaking was about eighty days. The hands required to accomplish the work were, 1130 full shifts of men at 9d. per day, and 4000 half-shifts at 6d., which will give an expenses in wages 1447. 16s. Materials were as follows:—Bariron, 3t.; charcoal, 15t.; medicine, 6t. 9s.; general expenses, 21. 0s. 5d.; making a total cost of 1712. 5s. 5d.

The value of the gold obtained from the sand was 1182t., and on deducting from that sum the cost of working, the sum of 1011L 14s. 7d. remains as profit to the owners of the mine. From this it will be evident that when the supply of gold is, as here, tolerably good, the speculation is very remunerative. Adventurers must, however, remember that although the foregoing is an average profit, there are times when the results are not so satisfactory. The men are paid not by the day's work, but for a given task, and they are not paid at the mines, but at the town situated some distance from them. And since the season during which the mines can be worked is limited, and since during the winter the population of the mines desert the mountains for the cities, it has become the custom to pay the men on the 10th of September, and just at the close of the mining season. This is a most unfortunate arrangement for the miners, for they then receive from 20% to 50% as the fruits of their labours, which they no sooner receive than they spend in feasting and drunkenness. Of the character of the miners not much that is favourable can be said. Their state of education is very low, and but few can read or write. Many of them are convicts, and so the community is not of the most peaceable character. But there is for even the poorest a chance, by steadiness, to recover their lost position, and an opportunity offered of getting out of their depraved state.

GREAT WHEAL BUSY MINE.

One of the largest of the original shareholders, and who appears to have closely studied the workings of this mine from the commencement of operations, thus writes with reference to the present position and prospect of the undertaking:—The startling discovery in the 140 of a large and valuable lode, 10 or 11 fathoms south of the engine-shaft, seems to clear up a mystery which has been perplexing the agents and adventurers for the last seven years. The present company took up the mine at the 95, down to which point the lode had been very wide and wonderfully productive, as shown by the plans. One of the old reports spoke of three lodes, which sometimes intersected each other. Another spoke of these as being but one lode, generally very wide, but often in two or more parts, and in a great many places only one worked. However this may be, it was found in sinking that the lode was seldom, if ever, more than 2 or 3 feet wide, and sometimes only 1 ft. wide; whilst in driving the 100 west of the engine-shaft the lode was small and unproductive for upwards of 100 fathoms, though in the levels above it had proved very productive. The 100 east was more productive, and in places a fine lode. In sinking below the 110 down to the 150, the lode continued small and of comparatively little value; and the 110, 120, and 130, though productive in places, were generally a disappointment.

The attention of the agent was drawn from time to time to the anomaly thus presented, and one and all agreed that the workings could not be on the main lode, and cross-cuts were put out to prove this; but, as the shaft was sinking, and the levels driving north of the elvan course, these cross-cuts were always put out north. Some time since the fact was recalled to mind that in sinking the shaft to the 100 part of the lode was in the elvans, and it was determined to try a cross-cut south in the 140; this was done, and a lode cut worth about 30t. per fm., about 3 or 4 fathoms south of the level. This cross-cut was continued, and in 4 or 5 fms. more driving the lode recently discovered was cut, and is now proved to be 9 ft. wide, very rich for tin and copper. It would thus appear that the lode passed through the elvans at about the 100, and from the distance at which it has been found from the engine-shaft in the 140 there can be no reasonable doubt that it is standing in whole ground up to the 100. This will be proved in a week or two by a cross-cut now going out in the 110.

With regard to the value of the discovery, though the article in the Journal of last week is correct so far as it goes, yet the extent of it is much understated. The writer, like the great Lawgiver, has only had a glimpse of the promised land. The 100 fm. level in Great Wheal Busy has been driven by the present parties 250 fms. from the point west of engine-shaft, where there was an immense deposit of tin and ore in the levels above (called Moyle's bottoms) to the present end, east of Walker's, where there is still a fine and valuable lode. The under levels—the 110, 120, 130, and 140—have been driven proportionately lesser distances, but still a great number of fathoms, and the 150 has been lately reached, and the first and smaller of the lodes seen in the 140 fm. level intersected. Considering that the present discovery may be made available by short cross-cuts from all these levels, and looking at the immense quantity of ground thus laid open, it may safely be asserted that there is no mine in the county presenting the same prospects. In fact, it comes to this, that the adventurers have for the last seven years been creating enormous reserves, the value of which cannot be told, but which may be fairly estimated at double the amount (250,000L) mentioned last week.

If we look at the eastern part of the mine the prospects are not less cheering there. A shaft (Walker's) is sinking in a bunch of tin from the 36, and will be communicated to the 100 by the end of October, and to the 110 by the end of the year. In this part of the mine there are six levels driving, all in valuable ground, the 100 being at present the most profitable. As soon as the shaft (Walker's shaft) is to the 100 an immense amount of ground, both east and west, can be stopped at low tribute, when the monthly returns (now 30 tons of tin, besides copper) will be more than double.

The tin is of better quality here, and in the deeper levels, than it was above, and much of that recently assayed has given a produce of a clear quarter of tin to the weight of the stone, thus proving the lode to be of great value, in many places doubtless above 100% per fm. Here also (from the 86) is a cross-cut going out to cut the celebrated Wheal Vor lode, which will, it is expected, be met with in six weeks or two months' time. It was an old saying in the neighbourhood that the adventurers will find it a hard pull up the hill; but once there, the going down on the other side will be very easy and pleasant, alluding to the dip of the ore ground eastward to Wheal Daniel. Such, indeed, the adventurers (who have spent upwards of 90,000L on this property) are likely to find the future, and it is only to be hoped that those who have held out to the ship so long, will not now be tempted to part with their interest. There can be no reasonable doubt that Wheal Busy must soon become as large and profitable a mine as Wheal Vor or Dolcoath, and that the shares will, ere long, command prices much in excess of the 14L paid upon them.

IMPROVED PULLEY FOR MINING PURPOSES.

For some years past Messrs. FOWLER and Co., of the Steam Plough Works, Leeds, have successfully applied their very ingenious CLIP PULLEY to their steam cultivating machinery, and it is satisfactory now to find that they have lately adapted it to the working of mines, in connection with which there are a large number of purposes where its use would be advantageous. It will be recollected that the improved pulley consists of a wheel with a double flanged periphery, each flange carrying a series of centres, upon which one-half of the clip pulley swings. Technically, the pulley is thus described:—It is made in two parts, the one forms the main casting, with arms and boss, carrying the centres of one row of clips, and forming half the groove of the pulley, and the other is a flange or ring, carrying the lower row of clips. This is screwed on to the main casting, in a similar way to a nut and bolt, and thus gives an adjustment between the centres carrying the clips, which admits of ropes of various sizes. There are through bolts, to prevent the ring from shifting on the main casting. The clips are cast with chilled surfaces, which prevents wear in the grooves; and as in their action when the strain comes on the rope they move towards the axis of the drums, there is no surging of the ropes against the clips, which is the means of reducing the wear of both the rope and the drum.

It is probable that in no business more than in mining is the advantage of avoiding injury to the rope more appreciated; and with respect to the clip pulley, it is claimed that the hold of the ropes by the clips is increased exactly in proportion to the pull, and the nearer the centre of the rope comes in a straight line with the centre of the clips the more securely the rope is held; but in practical working it is found desirable to allow the rope to go no further back than will give sufficient hold to keep it

from surging. The consequence of this is, of course, to reduce the wear of the rope and of the pulley, as stated, to the minimum, because the ordinary friction is done away with, and a firm yet easy grip substituted for it. Messrs. Fowler have just issued an illustrated catalogue, showing the application of the improved pulley to self-acting and half self-acting inclines, as well as to the driving of machinery situated far from the motive-power, and to the various other purposes connected with mining to which it is applicable; and, judging from the advantages which it possesses, it would seem that it requires only to be known to become generally adopted.

THE ASSOCIATION OF FOREMEN ENGINEERS.

We have no intention to interfere in what may be regarded as a purely personal question between the Chairman of this society and three of the six members of its committee, to whom reference was made in last week's Journal. As we happen, however, to have always entertained a high opinion of the association and of its usefulness, and to have watched with great interest its remarkable progress during the past few years, it will not be considered presumptuous, it is hoped, if we offer a few remarks upon a point which has lately been warmly discussed at some of its meetings. That point is the disposal of a sum of money amounting to 500L or 600L which had been contributed to its Benevolent Fund by a number of eminent engineering employers, and others, since February, 1861. Some members have thought that the money thus given had better be set apart, and that its future disbursement should be controlled by a body of trustees, the majority of whom shall be chosen from among its members. Others think that as the association came into existence as a benevolent association, it is still essentially a benevolent institution, and that as the whole of its rules are framed for the promotion of benevolent objects, it would be better to add the amount so generously, and, for the most part, unreservedly given, to the general fund of the society, for the control of which the existing rules provide. No doubt the two propositions are well worthy of careful and calm consideration, and they both present some claims to acceptance. If the voluntary fund of the employers were maintained separately from the subscribed fund of the foremen, and dispensed by the votes of the former, it seems probable that the amount contributed would in time be materially added to, for it would constitute really an employers' joint-stock fund for the relief of necessitous servants, and save the contributors from the inconvenience of individually providing pensions for their old employees. This, we take it, is the strongest argument which can be advanced in favour of the separate system; and it may be summed up briefly. It means, from the foremen's point of view, "more money, and less power over it." From the masters' point of view it means, "Insurance from individual responsibility."

On the other hand, if the fund given be added to that subscribed by ordinary members (which also we believe amounts to about 500L), the latter will have complete control over the whole, and may deal with it as a matter of right in any way that accords with their rules, for the benefit of decayed members of the association.

Believing that we have stated the case fairly, being equally desirous of advocating the interests of both classes concerned, and knowing the past history of the society, we have no hesitation in saying that our own opinion is strongly in favour of having one fund only. Let the employers be generous, and place full confidence in the associated foremen. The foremen, we are sure, will reciprocate the good feeling thus evinced, and as they have studiously avoided in the past every act which might be construed into an offence to the masters, so will they in the future—the more so, since gratitude will thus be united with respect, and together form the moral cement of friendship. It has never been charged to the London Association of Foremen Engineers that they have misappropriated their funds, or diverted them to purposes beyond the spirit or the letter of their own rules. They have accordingly gone on and prospered. It will be a pity if that prosperity be marred by the consideration of a really graceful contribution to their funds into what might have the semblance of a humiliating charitable dole. The dignity and the best interests of both masters and foremen are, as we think, alike involved in the words "perfect freedom" and "mutual regard," and the one will assuredly be guaranteed by the other. Let gifts be gifts, and not individual loans! If the employers choose to establish a fund for the object above referred to, we can have nothing at all to say against such a course. In fact, the idea, *per se*, is a very good one, and might well be entertained by those gentlemen. It is scarcely necessary, however, that in the formation of such a protection society they should even consult the members of the Association of Foremen Engineers. The engraving of the scheme upon the latter must lead to complications embarrassing to all parties, and productive of little advantage to any. In conclusion, we appeal to the employers on behalf of the association, and ask them to leave its members to the peace and unity they have hitherto enjoyed. There is little doubt that by so doing they will be themselves in all ways the gainers.

* * * The MINING JOURNAL is published in time for dispatch by the early mails on Saturday, and should be delivered with the usual morning papers of that day. In cases of irregularity, we recommend that orders be given to Messrs. Smith, or other active agents, who will readily undertake to supply it.

WANTED, a GENTLEMAN to FORM a LIMITED COMPANY for a FIRST-CLASS SLATE OPENING, near the Penrhyn Quarries, Bangor.—For particulars, apply to "E. W.", Post-office, Llangoed, Beaumaris.

WANTED, an OFFER for ONE HUNDRED WEST MARIA WHEAL FORTESCUE, and ONE HUNDRED GUNNISLAKE (Clitter).—Apply by letter to Mr. R. MOTT, No. 6, Westbourne-terrace, Drayton-road, Croydon.

CRENVER AND WHEAL ABRAHAM SHARES.—ONE HUNDRED SHARES, or any part thereof, TO BE SOLD (£3 each). Price, 15s. per share.—Apply to "M.", care of Messrs. Barker, 1, Castle-court, Birchin-lane, Cornhill, E.C.

SHARES FOR SALE IN THE MINERA DISTRICT, WREXHAM, NORTH WALES:—4 Minera Mine, 30 Minera Union, 30 South Minera, 20 Park, 20 Central Minera, 50 Wynnstay, and 20 Pool Park shares. Also 50 shares in the Blaen-y-Pwll Mine, Merionethshire; 100 shares in the Diphrys Casson State Quarry, and 50 shares in the Provincial Welsh Insurance Company, Wrexham.—For particulars and price, apply to Mr. ALBERT BURY, sharebroker, Temple-street, Wrexham.

CAPT. J. RABEY OFFERS FOR SALE FIFTY SHARES, at the net price of £3 per share, in the CAL-E-PANT MINE, joining the great Minera Mine, and one of the best prospects in the district, being all whole ground, and the mine paying for itself now at the shallow depth of 40 yards.—Address, Captain J. RABEY, Coalport, near Wrexham, Denbighshire, North Wales.

FOR SALE, a MINE SETT, in the parish of CAMBORNE, CORNWALL, adjoining the Setons.—For particulars, and to treat for the same, apply to Mr. J. R. DANIELL, solicitor, Camborne.

HORIZONTAL ENGINES FOR SALE, at very low prices:—One 12 in. cylinder, 24 in. stroke; one 12 in. cylinder, 36 in. stroke; and two 14 in. cylinders 24 in. stroke. All ready for delivery, and may be had with or without fly-wheels.—Apply to Messrs. E. PAGE and Co., Laurence Pountney-place, Lagrange Pountney-hill, Cannon-street E.C.

TO INVESTORS.—In consequence of the death of the proprietor, the FOLLOWING SHARES are FOR SALE, at GREATLY REDUCED PRICES. Particulars on application to Mr. J. NEWCOMB, 33, Cumberland-street, Birmingham, S.W.:—

No. of shares.	Paid.	Price.	No. of shares.	Paid.	Price.
20 Clewown Wood.	£70	£35	50 So. Devon Slab	16 1/2	140
6 Haven Silver-Ltd.	25%	7	and State.	35	15
10 Fortune Cons.	15	10	50 Wheel Idia	35	35
30 City of London	70	45	10 East India Co.	50	35
			ton Agency	20 Wh. Sparrow	—

No reasonable offer refused.

* Has paid a dividend of 5 per cent., and is about to declare another.

M. R. WALTER TREGELLAS, 3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C., continues to deal at close prices in all good sound dividend and progressive mines.

NORTH SHEPHERD MINE continues to progress favourably, and shares have further advanced. The quotation is now £7 to £7 1/2, at which W. TREGELLAS is prepared to deal in any number of shares.—May 12, 1865.

M. R. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C., is in a position to give sound advice as to the sale or purchase of mining shares, the present being one of the most favourable opportunities for speculation or investment to result in large profits. List free on application.

* * * SPECIAL BUSINESS in Great North Laxey.

M. R. THOS. THOMPSON, MINING OFFICES, 12, OLD JEWRY CHAMBERS, LONDON, E.C.

Mr. THOMPSON being intimately acquainted with the LAXEY DISTRICT, in the Isle of Man, and its various mines, and continually receiving private and valuable information respecting them, will be happy to communicate with anyone thinking of making an investment in the mines of this district.

M. R. CHARLES BAWDEN, MINE AGENT, ST. DAY, SCORRIER, CORNWALL, from recent inspections, is in a position to advise what mines to invest in, and what to avoid, two of which he will guarantee all loss for one-half the profit for the next six months. Terms for inspection and report, £50 per day.

WANTED TO PURCHASE, 20 Treaseyan shares.

HARRIS AND CO., STOCK AND SHAREBROKERS, AND FINANCIAL AGENTS, 15, GEORGE STREET, MANSION HOUSE, LONDON, E.C.

GREAT TREGUNE CONSOLS.—A SPECIAL GENERAL MEETING of this mine will be HELD at the offices, No. 4, Frederick-place, Old Jewry, on FRIDAY, the 19th May next, to take into consideration the present important position of the mine. The chair will be taken at Three o'clock precisely.

By order, CHAS. PEARSON, Secy.

THE SOVEREIGN GOLD MINING COMPANY (LIMITED).—Notice is hereby given, that a SPECIAL GENERAL MEETING will be HELD at 20, St. Helen's-place, Bishopsgate-street, London, on FRIDAY, May the 19th, at Twelve o'clock precisely, when a resolution to wind-up the company voluntarily, and to appoint a liquidator, will be proposed.

By order of the Board, W. J. LAVINGTON, Secy.

THE NATIONAL BANK IS AUTHORIZED TO RECEIVE SUBSCRIPTIONS FOR THE SHARES OF THE PERUVIAN RAILWAYS COMPANY, ON THE TERMS OF THE FOLLOWING PROSPECTUS.

PERUVIAN RAILWAYS COMPANY (LIMITED).

With Peruvian Government guarantee of interest At the rate of £7 per cent. per annum, as hereinafter set forth, on a total capital of £5,340,000.

Present Issue:—£1,670,000, in 66,800 shares of £25 each. Deposit, £1 per share an application, and £1 per share on allotment. Future calls of £2 10s. per share will be made at intervals of not less than three months between each call.

Seven per cent. per annum will be paid during the construction, and is guaranteed by the International Contract Company (Limited).

DIRECTORS.

WILLIAM LATHAM BAILEY, Esq., (Bailey Brothers and Co., Liverpool).

WILLIAM CARTER, Esq. (Joseph Robinson and Co., Laurence Pountney Hill).

JOHN ENNIS, Esq., M.P., Director of the Bank of Ireland.

P. S. FLETCHER, Esq. (Alexander Fletcher and Co., 10, King's Arms Yard).

S. G. GETTY, Esq., M.P. for Belfast, Onslow-square.

W. R. LINDSAY, Esq. (Messrs. H. H. Vivian and Co., Birmingham).

S. L. KOE, Esq., Bowring Ironworks, Bradford.

ALBERT RICARDO, Esq., Angel-court, Throgmorton-street, Director of the National Bank.

ROBERT SIMPSON, Esq. (Frederick Levick and Co., Charlotte-row and Cwm Colyn Ironworks).

BANKERS.

London The National Bank.

Liverpool The National Bank of Liverpool.

Manchester The Manchester and Liverpool District Bank.

Ireland The Bank of Ireland and its Branches.

The Branches of the National Bank.

CONTRACTORS.—The International Contract Company (Limited).

ENGINEERS.—George Parker Bidder, Esq., C.E.; John Mortimer Heppell, Esq., C.E.

SOLICITORS.

Messrs. Blacham, Dallymple, Drake, and Co., Parliament-street.

Messrs. Baxter, Rose, Norton, and Co., Victoria-street.

BROKERS.

London Messrs. P. Cazenove and Co., Threadneedle-street.

Messrs. Seymour and Co., Throgmorton-street.

[MAY 18, 1865]

THE BRITISH MINING AND SMELTING COMPANY (LIMITED).

Capital £900,000, in 15,000 shares of £60 each

(With power to increase its capital by the issue of new shares).

Incorporated under the Companies Act, 1862, with limited liability.

Deposit on application, £2 per share, and a further sum of £3 per share on allotment.

DIRECTORS.

WILLIAM ALEXANDER THOMAS, Esq., Chairman of the Devonshire Great Consolidated Copper Mining Company.

THOMAS MORRIS, Esq., Resident Director of the Devonshire Great Consolidated Copper Mining Company.

JOHN THOMAS, Esq., Director of the Devonshire Great Consolidated Copper Mining Company.

PHILIP EDWARD BLAKEWAY, Esq., Director of the Devonshire Great Consolidated Copper Mining Company.

(With power to add three to their number).

BANKERS—Messrs. Barnetts, Hoares, Hanbury, and Lloyd.

CONSULTING MINE AGENT.

Captain James Richards, Principal Agent of the Devon Great Consols.

SECRETARY—William Augustus Buckley, Esq.

OFFICES, No. 22, GREAT ST. HELEN'S, LONDON, E.C.

PROSPECTUS.

The great improvement in the character of the lode at the 224 fm. level indicating the proximity of valuable deposits of ore, and the continuous splendid course of ore in the 115 fm. level on the south lode, together with the promising lode lately discovered 130 fms. south of Hitchin's shaft on the main lode of the mines of the Devonshire Great Consolidated Copper Mining Company, as well as the progressive development of ore ground in the lower levels at Hingston Down, prove to a demonstration that ore exists both shallow and in depth in the Tavistock district, and only requires the judicious application of capital to secure its profitable development.

It has been represented to the gentlemen principally interested in the Devon Great Consolidated Copper Mining Company that they would greatly promote legitimate mining if they would consent to become the directors of a powerful company, with adequate capital, whose object would be the purchase of mining sets, in Devon and Cornwall especially, which are languishing for the want of funds to continue operations with energy and perseverance; as also, if thought desirable, the establishment of smelting works.

These gentlemen, with an earnest desire to promote legitimate mining, have consented to assist in carrying out the objects proposed, provided a sufficient capital can be raised at the commencement—long experience having convinced them that the time of good mining is the necessity of repeated calls on an unprepared constituency, and they have concurred in the formation of the British Mining and Smelting Company (Limited) accordingly.

The sound commercial principles which have been so successfully adopted in the management of the Devon Great Consols Mines will be applied to every undertaking of this company.

A paid-up capital is proposed which it is thought will be sufficient to carry out the immediate objects of the company, unless some very desirable mining sets shall invite extended operations.

No further call beyond the £5 per share before mentioned will be made without the sanction of a special meeting of the proprietors convened for that purpose.

The surplus funds of the company will be lent out at interest or invested in first-class securities; and in order to keep alive the attention of proprietors from time to time to the progress of the company, a distribution of the available interest will be made annually, and the profits will be divided as they may accrue, and at such times as the directors may deem advisable.

The directors have already secured the purchase of the mining sets of Crowndale, on the east of the Devon Great Consols Mines, and of Wheal Benny and River Tamar, and Wheal Williams on the west, with the plant and machinery thereon, for the sum of £10,000, and are in negotiation for two or three other sets in the same neighbourhood, which they believe will be sufficiently extensive for the present, and wherein operations may be commenced forthwith—the greater part of the machinery being already on the ground.

The directors think it unnecessary to insert in this prospectus any mine agents' reports upon the value of the sets in question; suffice it to say, they have the unqualified approbation of Capt. James Richards and many other mining agents, whose reports, in extenso, may be had on application at the company's offices, and the locality in which the sets are situate speaks for itself, the Devon Great Consols Mines alone having yielded a profit of one million sterling in 21 years.

The qualification for the office of director will be 100 shares: 200 shares each will be all that will be retained by the present directors, and the remaining shares will be allotted to the public in amounts not larger than 200 shares, nor smaller than 10 shares; the directors being persuaded that, in the interesting but somewhat speculative pursuit of the mining, the shares ought to be distributed amongst a large number of individuals.

The deposit of £5 per share having been duly paid to the bankers of the company, applications for shares must be addressed, in the form annexed, to Mr. W. A. BUCKLEY, the secretary, No. 22, Great St. Helen's, London, E.C.

London, April, 1865.

FORM OF APPLICATION FOR SHARES,

To be forwarded entire with the bankers' receipt to the secretary.

To the Directors of the British Mining and Smelting Company (Limited).

GENTLEMEN.—Having duly paid to Messrs. Barnetts, Hoares, Hanbury, and Lloyd, the sum of £5 per share on shares in the British Mining and Smelting Company (Limited), I request you will allot to me the said number of shares; and I hereby agree to accept the same, or any less number, subject to the several conditions set forth in the Articles of Association of the company.

Name in full.....

Address as it should appear on the Register of Members

Quality

Usual signature

SOUTH WALES CONSOLIDATED LEAD MINING COMPANY (LIMITED).

Capital £20,000, in 2000 shares of £10 each.

Amount to be called up, £2 10s. per share; £1 on application, and £1 10s. on allotment.

DIRECTORS.

Sir WILLIAM SMITH, Bart., Grenville-place, St. John's-wood, London.

G. W. CHARLWOOD, Esq., Fetham, Hounslow.

JOHN SALVAGE, Esq., Greenfield House, Newbridge, Newport.

JOHN ROWLANDS, Esq., 2, Cophall-buildings, London, E.C.

(With power to add to their number.)

BANKERS—Imperial Bank (Limited), Lombury.

SOLICITORS—Messrs. Hancock, Sharpe, and Hales, Birch-in-lane, London, E.C.

SECRETARY—Mr. Charles Thomas.

OFFICES, —, GREAT ST. HELEN'S, LONDON, E.C.

PROSPECTUS.

This company has been formed for the purchase and working of the Cwmbran, Cas-sara, Pentwyn, and Lady Eliza Mines, situated in the parish of Llantegidoc and Mothev, in the county of Carmarthen, within four miles of the Llantegidoc Railway-station, and eight hours' journey of London by railway.

The present company's grant is very extensive, and is traversed by three large metalliferous veins or lodes, embedded in a clay-slate or killas stratification, all of which have been found productive of lead ore, so far as explored. Reports of competent miners contain a full description of these lodes, and the extent to which they have already been worked, and all tend to show that the mine has as yet had but little trial, and is now only approaching that depth where, on the average, in the lead mines of the principality, the greatest wealth is obtained.

The ore raised is of the best quality, containing 72 to 80 per cent. of fine Potter's lead and 8 oz. of silver per ton, samples of which can be seen at the company's offices.

The natural advantages are such that, in the course of a short time the company expect to be able to work the mines without the employment of any steam machinery for the purpose of drainage. An unlimited supply of water flows through the sett all the year round, and the work now contemplated when finished will result in the employment of this stream, to the permanent benefit of the company.

An important part of this property has been lately carried on by the Cwmbran Mining Company (Limited). This company commenced operations with a working capital of £2800—£2000 of which was expended upon the mine, but chiefly in renovating the dressing-floors, providing new pumps, sinking new shafts, &c., all necessary for the proper development of the mine, and of which the present company will have the advantage.

The Cwmbran Company, during the two years they worked their mine, with all hindrance caused in making alterations and putting in new pumps, raised and sold £127 worth of lead ore; and in the last three months, ending April, 1864, sold £592 worth of ore, at a cost of £559, showing that at the time of winding-up the mine was yielding a small profit.

The present company, by working on a limited scale, could make the mine at least self-supporting; but the object is to thoroughly develop the property, and with reference to that part described as Cwmbran to extend levels into the northern part, and eventually to do without the aid of steam-power, as suggested by the reports.

Upwards of £20,000 have been from time to time expended upon this property in machinery and bringing it to its present state, so that all the preliminary expenses attendant upon the commencement of a new mine have been already met, and the works put in such a position that immediate returns of lead can and are now being made.

The plant consists of a new 36-in. cylinder Cornish condensing-engine, with large tubular boiler; about 90 fms. of 7, 8, and 9-in. pumps, with 8-in. plunger and drawing lifts, with rods, complete; whim and drawing-gear; skip-road and skips; 100 fathoms tramroad and trans; large water-wheel and crusher; dressing-floors and apparatus; jigg-machines; flat and round buddles, worked by water-wheels; shears and caps; ropes, chains, and pulleys; tools and utensils of every kind requisite for the efficient working of a mine of this magnitude. There are also reserves for supplying the engine and dressing-floors in dry weather, all in good working order and condition. Erected on the mine are two substantially-built houses, suitable for a resident agent or agents.

That portion of the property known as Cwmbran now produces from 10 to 12 tons of lead per month, which about meets the monthly cost; in addition to which there are reserves of ore, lately discovered by long drivages in the north part of the mine, sufficient to enable the company, upon completion of the ventilation and communication with surface, to increase the return to 30 tons per month. This return, it is calculated, would leave a profit of at least £20 per cent. upon the capital employed; and, with the steady development of the property, and with a continuation in depth of the present productivity of the lode, there is no doubt that a lasting, rich, and profitable mining property will be found, and fully equal to other successful companies in the South of Wales. No promotion money will be paid, and the preliminary expenses will be strictly confined to such as are indispensable.

The consideration agreed to be paid for the purchase of all the existing rights in the mines and properties, including all machinery, buildings, and the whole of the plant, is £2500—£2500 of which to be paid in cash, and the remaining £2500 in shares paid up to £5.

No call of more than 10s. per share will be made at any one time, nor will any call be made at a less interval than three months.

The company being "Limited," no shareholder, under any circumstances, can be liable for more than the amount of the shares for which he may subscribe.

Application for shares may be made to the directors, at the offices of the company, accompanied by the banker's receipt. Prospectuses, together with reports and forms of application for shares, may be had at the offices of the company.

ISAAC FRANCIS, NANT, WREXHAM, a dresser of 30 years' experience, is OPEN TO INSPECT ANY DRESSING PLACE ON moderate terms. Mr. Francis can introduce PLANS OF IMPROVEMENTS that will SAVE THIRTY PER CENT. COST in certain departments of any dressing doors.

India Office.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL, notice is hereby given that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before Monday, the 22d day of May last, 1865, to RECEIVE PROPOSALS in writing, sealed up, from such persons as may be willing to supply—

BRITISH IRON.

And that the conditions of the said contract may be had on application at the India Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M. of the said 22d day of May, 1865, after which hour no tender will be received.

GERALD C. TALBOT, Director-General.

India Office, May 8, 1865.

India Office.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL, notice is hereby given that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before MONDAY, the 16th of May inst., to RECEIVE PROPOSALS in writing, sealed up, from such persons as may be willing to supply—

SLIP COPPER.

And that the conditions of the said contract may be had on application at the India Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M. of the said 16th day of May, 1865, after which hour no tender will be received.

GERALD C. TALBOT, Director-General.

India Office, May 8, 1865.

In Chancery.

PURSUANT to an Order of the High Court of Chancery, made in a Cause WILLIAM HENRY FORMAN, plaintiff, against WILLIAM HARVEY and others, defendants, ALL PERSONS CLAIMING to HAVE ANY INTEREST in the ADVENTURE in the plaintiff's bill, called WHEAL ANNA MINE (and formerly called Wheal Friendship Mine), situate in the Parish of St. Hilary, in the County of Cornwall, are, by their solicitors, on or before the 2d day of June, 1865, to COME IN and PROVE THEIR CLAIMS at the chambers of the Vice-Chancellor, Sir John Stuart, No. 12, Old-square, Lincoln's Inn, Middlesex, or in default thereof they will be summarily excluded from the benefit of the said order. Friday, the 9th day of June, 1865, at One o'clock in the afternoon, at the said chambers, is appointed for hearing and adjudicating upon the claims.

ALFRED HALL, Chief Clerk.

OLIVERSON, LAIRE, and PEACHEY, S. Frederick's place, Old Jewry, London, plaintiff's solicitors.

Dated this 2d day of May, 1865.

IMPORTANT SALE OF VALUABLE LEAD MINE AND MINING MATERIALS.

MR. DAVID JONES has received instructions to SELL, BY AUCTION, on the mine, on the 18th of May, at Twelve o'clock precisely, all the VALUABLE MACHINERY, PLANT, and MATERIALS of the RHOSYDOL AND BACHEIDDON MINES, situated in the parish of PENEGOES, in the county of MONTGOMERY, and within about six miles of Machynlleth Railway station, including a first-class 30 in. CYLINDER CONDENSING ENGINE, PUMPING and DRAWING MACHINERY, a 30 ft. WATER WHEEL, CRUSHING MILL, circular, flat, and tie-bundles, jiggers, &c., all in first-rate working condition, with all the usual appendages of a productive lead mine in full work.

The first lot will be the steam-engine, and the purchaser or purchasers will have the option (subject to the approval of the lord of the manor) of having a lease of the mine, upon a royalty of 1-15th, with the usual conditions.

For further particulars, or to treat for the whole by private contract, apply to GEORGE HADLEY, Esq., 20, St. Helen's-place, Bishopsgate-street, London; or to the Auctioneer, Machynlleth. Dated March 31, 1865.

Sale to commence at Twelve o'clock precisely.

EAST WHEAL FALMOUTH MINE, IN THE PARISH OF KENWYN, NEAR TRURO.

MESSRS. WARE AND SON WILL SELL, BY AUCTION, on the mine, on Thursday, the 18th May, at Twelve o'clock precisely, the whole of the SETT and MACHINERY of the above mine, comprising—

A 20 in. HORIZONTAL ROTARY PUMPING and DRAWING cylinder ENGINE, 5 ft. stroke, with 8 tons BOILER, and drawing gear attached.

40 fms. of 9 in. pit-work, with plunger lift; about 20 fms. of 6 in. plunger lift, together with a quantity of timber, iron, and other useful mining articles, the whole of which are nearly new.

For further particulars, or to treat for the whole by private contract, apply to Mr. GEORGE DOWN, Cathedral-yard, Exeter; or to Capt. WM. HANCOCK, on the mine. May 8, 1865.

WARE AND SON, Auctioneers.

GURLYN MINE, ST. ERTH, CORNWALL.

TUESDAY, MAY 23, 1865.

MR. R. H. CADE has received instructions to SELL, BY AUCTION, on Tuesday, the 23d day of May instant, at Eleven o'clock in the forenoon, at GURLYN MINE, in the parish of St. Erth, the following VALUABLE MATERIALS and MACHINERY, viz.:—

A 60 in. cylinder PUMPING ENGINE, nearly new, 9 ft. stroke, equal beam, with TWO BOILERS 11 tons each.

50 fms. 16 in. 9 ft. pumps.

18 in. plunger pole.

18 in. H. piece.

18 in. top doorpieces.

18 in. windbore.

17 in. pole case.

15 in. working barrel.

15 in. doorpiece.

15 in. windbore.

46 fms. 11 in. 9 ft. pumps.

22 in. H. pieces.

22 in. doorpieces.

22 in. pole cases.

22 in. windbore.

22 in. 10 ft. poles.

18 in. 9 ft. pumps.

12 in. working.

12 in. doorpiece.

12 in. windbore.

10 in. working.

10 in. doorpiece.

10 in. windbore.

Flange bolts and burs.

Rod pins.

40 fms. 7 and 8 in. wood rods.

Staves and glands.

Wood balance-bob.

Alast at GUS

MAY 13, 1865.

THE MINING JOURNAL.

THE HIRWAIN COAL AND IRON COMPANY (LIMITED).

Incorporated, with limited liability, under the Companies Act, 1862.
Capital £100,000, in 5000 shares of £20 each.
Deposit, £1 per share on application, and £1 further on allotment.
Subsequent calls, £1 per share, at intervals of not less than two months.
It is estimated that not more than £10 per share will be called up.
DIRECTORS.

HANDEL COSSHAM, Esq., colliery proprietor, Bristol.
WILLIAM H. WILLIAMS, Esq., colliery proprietor, Cardiff and Bristol.
THOMAS CALLENDER HINDE, Esq., ironmaster, Hirwain.
JOSEPH WETHERED, Esq., colliery proprietor, Bristol.
GEORGE BULLOCK MURLY, Esq., solicitor, Langport.
ROBERT WHITHAM, Esq., merchant, Cannon-street, Manchester.
THOMAS BRIGGS, Esq., merchant, Cannon-street, Manchester.
BANKERS.—Stockley's Banking Company, Bristol.
The Consolidated Bank (Limited), London and Manchester.
AUDITORS.—Charles Julius Ryland, Esq., Exchange Bristol.
Messrs. Broome, Child, Murray, and Co., King-street, Manchester.
BROKERS.—The Members of the Bristol Stock Exchange, Bristol.
MESSRS. Sidney Cooper and Co., 31, Threadneedle-street, London.
SECRETARY.—Mr. Thomas Lloyd Davies, Hirwain.

REGISTERED OFFICE, —HIRWAIN, NEAR ABERDARE.

This company has been formed for the purpose of leasing and purchasing the extensive and very valuable mineral estates of Hirwain Common and Rhigos, comprising upwards of 5000 acres of coal, ironstone, fire-clay, alluvial clay, sand, and building stone, together with the blast furnaces, rolling mills, forges, fire-brick works, collieries, plant, &c., known as the Hirwain Ironworks.

These properties, which are held for several terms of years, of which upwards of 58 years are in each case unexpired, have been purchased for £18,000, payable over a period of twelve months, including the machinery, plant, shafts, and other permanent works, performed up to the 25th of March last. The rents and royalties are moderate, and lower than those of the adjacent works.

The works comprise four massive stone-built blast-furnaces, and all appliances, equal to the production of 180 tons of pig-iron each per week; forge and rolling mills, equal to the production of 200 tons of puddled bars weekly, or an equivalent proportion of finished merchant iron; fire-brick works, capable of producing 20,000 bricks weekly; tanks; iron foundry; ranges of blacksmiths' shops, fitting shops, &c.; resident manager's house, and a large number of miners' cottages.

The mineral property embraces an area of 5019 acres 9 rods 18 perches—all in a ring-fence, and held under one lease. The section of the coal is as follows:—

1.—Gras Vein	3 ft. 0 in.
2.—Gorthwyn	3 6
3.—Two-feet Nine-inch Coal	2 6
4.—Driver Vein	2 6
5.—Upper Four-feet Vein	3 6
6.—Upper Yard Coal	3 0
7.—Six-foot Vein	4 6
8.—Lower Yard Coal	3 9
9.—Nine-foot Vein	8 0
10.—Rocky Vein	3 6
11.—Lower Four-feet Vein	3 7
12.—Diggings	4 5

Giving an aggregate thickness of 45 ft. 9 in., containing, by careful computation, at a moderate depth, upwards of one hundred millions of tons of workable coal—equal to 1000 tons a day for upwards of 300 years. The section, as will be seen, embraces all the celebrated steam coals of the Aberdare district.

A very large portion of the property is unwatered by drainage levels, and the ground has been proved to lie very regularly with the various seams in their usual order. The coal is absolutely smokeless, contains the highest proportion of fixed carbon (on which the economic or heating value depends) of any steam coal known, and is admirably adapted for locomotive purposes, as well as for stationary engines and ocean steamers.

The clay ironstone of the Welsh coal basin underlies the coal throughout the whole extent of the tract, and are remarkable for their excellence, the iron smelted from them being similar in quality to the famous Blaenavon and Pontypool brands.

The property contains inexhaustible beds of the finest fire-clay, fire-stones, and building stones; and an unlimited supply of limestone for flux in the blast furnaces is obtainable from quarries leased to this company, at the unusually low cost of £2. 2d. per ton, delivered at the works.

The present openings have intersected at various points nearly the whole of the seams of coal and ironstone; and it is estimated that, by an additional outlay of about £15,000, the "get" or "output" of coal will within twelve months be 1000 tons a day, which may afterwards be still further largely increased.

The development of this very valuable property has been hitherto delayed by the want of adequate railway facilities; but recent extensions have supplied this defect, and the railway communications now open, or approaching completion, are everything that can be desired. The Vale of Neath Railway, which has both broad and narrow gauge laid down, intersects the property, and is connected with the furnaces and the private railways of this company, by convenient sidings and junctions; and as both the Great Western and London and North Western Companies exercise running powers over the Vale of Neath line, through routes and through rates are afforded to all parts of their respective systems. The Taff Vale Railway Company are also pushing on their Dore Valley Line, which will extend up to the Golyne Hirwain Pit, on this property. Direct railway communication will thus be afforded to the four channel ports—Briton Ferry, Swansea, Cardiff, and Newport—while the rates to Birkenhead have been recently reduced to 7s. 2d. per ton, and to London, including City dues, to 9s. per ton. These facilities cannot fail to extend the already large and rapidly-increasing demand for this coal in the London and Liverpool markets, and it is believed that the very remunerative profits which hitherto had been realised will be more than sustained in the future, as the area of the smokeless steam coal of the Aberdare district is of limited extent.

The directors, who are gentlemen familiar with mining and colliery operations, have carefully examined the property, and they have fully satisfied themselves of its great value, the vastness of its mineral resources, and its powers of production. The geological and mining conditions are highly favourable to economical working. These advantages, combined with the facilities of railway transit, and the small additional outlay required to develop the property, lead the directors to the confident expectation of immediately accruing revenue for dividend, and they have subscribed for £40,000 of the total amount of capital, free from any preferential or guaranteed dividend, leaving £60,000 for general allotment.

No promotion money will be paid, and the expenses will be confined to the necessary payments.

If no allotment is made, the deposit money will be returned in full.

Plans, schedules, sections, and reports on the value and capabilities of the property may be seen at the offices of the company, at Hirwain; or at the offices of Messrs. W. H. Williams and Co., Exchange, Bristol; and of Mr. ELLIS LEVER, Marsden-square, Manchester; or with copies of the Memorandum and Articles of Association, prospectuses, and forms of application may be obtained.

Prospectuses and forms of application may be obtained also of either of the directors, bankers, auditors, or brokers. Copies of the leases may also be seen at the offices of Messrs. W. H. Williams and Co., at Bristol; or at the offices of G. B. MURLY, Esq., of H. E. MURLY, Esq., solicitors, Bristol.

Hirwain, near Aberdare, May 1, 1863.

No. TO THE Directors of the Hirwain Coal and Iron Company (Limited).

GENTLEMEN.—Having paid a deposit of £1 per share, I beg to apply for shares of £20 each, in the Hirwain Coal and Iron Company (Limited), and I hereby agree to become a shareholder in that company, subject to its rules and regulations, and to accept such shares, or any less number that may be allotted to me.

Name in full..... Address in full..... Profession or occupation.....

Dates.....

THE HIRWAIN COAL AND IRON COMPANY (LIMITED).

Notice is hereby given, that NO APPLICATIONS FOR SHARES will be received AFTER FRIDAY, the 19th inst. By order of the Board,

T. L. DAVIES, Sec.

MANCHESTER, AND WEST END OF LONDON.

M. W. HANNAM, MINING, SLATE QUARRYING, INSURANCE, AND GENERAL SHAPEROKEE, ROYAL INSURANCE BUILDINGS, KING STREET, MANCHESTER; and 31, REGENT STREET, LONDON, S.W.

INSTANTANEOUS COMMUNICATION with the STOCK and MINING EXCHANGES, avoiding the delay and annoyance of visiting the City to ascertain prices.

A Monthly Investment Circular on application.

MINING OFFICES, MANCHESTER.

THOMAS MOLYNEUX AND CO., MINE AGENTS, SHAREBROKERS, AND GENERAL COMMISSION AGENTS. Reliable information can be obtained as to purchase and sale of shares.

Office of the Hazel Grove Silver-Lead Mining Company (Limited), Flintshire, 24, Princess-street, Manchester.

NORTH OF ENGLAND MINING AND ENGINEERING OFFICES, MANCHESTER.

MESSRS. HARVEY AND CO., MINING ENGINEERS, AGENTS, AND SHAREDEALERS, CLARENCE CHAMBERS, MANCHESTER, are at all times in a position to deal in all the market Dividend and Premiums on various Mine shares, and also to advise on all mining matters, being practically acquainted with the business, and having a daily communication from the mining districts of Devon and Cornwall.

Messrs. HARVEY and Co. publish a monthly "Mining Circular," containing a valuable summary of mining information. Forwarded gratis on application.

The Circular for February will contain special reports on South Wheal Bassett, Wheal Bassett, and East Carn Brea.

Bankers: The Consolidated, Manchester; and the Alliance, Lothbury, London.

CAPT. C. WILLIAMS, TYN-Y-WERN, TALIESIN, via SHREWSBURY, has had upwards of 20 years' practical experience in mining, during which time he had the entire management of several English and Welsh mines. Residing in the centre of the CARDIGANSHIRE MINING DISTRICT, and in close proximity to those of MERIONETHSHIRE and MONTGOMERYSHIRE, he OFFERS HIS SERVICES TO SURVEY AND REPORT UPON ANY MINE.

CAPT. CHARLES WILLIAMS is at all times in a POSITION to FURNISH CAPITALISTS WITH RELIABLE INFORMATION respecting MINING in NORTH and SOUTH WALES, in which they should embark or avoid. C. WILLIAMS has prepared a list of most of the mines that are likely to pay, and can name two or three that will turn out a great prize.

Tyn-y-Wern, Taliesin, via Shrewsbury, April 18, 1865.

GOVERNMENT SECURITIES, JOINT-STOCK BANKS, FOREIGN BONDS, AND BONDS, COLONIAL SECURITIES, of 78, LOMBARD STREET, LONDON, E.C., may be consulted confidentially as to the eligibility of all bond-like investments. A selected list forwarded on application.

NICHOLLS, WILLIAMS, AND CO., ENGINEERS, BEDFORD IRONWORKS, TAVISTOCK.

MANUFACTURERS of STEAM ENGINES of EVERY DESCRIPTION, made on the BEST and NEWEST PRINCIPLES. We beg more especially to call the attention of the public to the manufacture of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS of EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON and HEAVY SHAFTS of ANY SIZE. CHAINS made of the best iron, and warranted. RAILWAY WORK of EVERY DESCRIPTION.

ALL ORDERS FOR ABROAD RECEIVE their BEST ATTENTION. NICHOLLS, WILLIAMS, and Co. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.

Messrs. NICHOLLS, WILLIAMS, and Co. have always a LARGE STOCK of SECOND-HAND MINE MATERIALS in stock, and at moderate prices.

PATENT FLEXIBLE TUBING, AND BRATTICE CLOTH FOR MINES, MANUFACTURED BY ELLIS LEVER, PATENTEE, WEST GORTON WORKS, MANCHESTER.

108

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS, AND IS EASILY REMOVED WHEN NO LONGER REQUIRED.

109

THE AVANTAGE OF THE PATENT FLEXIBLE TUBING IS THAT IT IS FLEXIBLE, AND CAN BE EASILY FITTED INTO THE SHAFTS AND TUNNELS,

[MAY 13, 1865]

THE MINING SHARE LIST

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last paid
1500 Aldersey Edge (cop.), Cheshire [L.]	10 0 0 ..	..	11 3 0 ..	0 15 0 - Dec.	1864	
4500 Bedford United (copper), Tavistock	2 0 0 ..	..	15 2 0 ..	0 13 11 0 .. 0 2 6 - Oct.	1864	
1344 Bosswall (tin, copper), St. Just	6 15 0 ..	..	1 0 0 ..	0 5 0 - May	1864	
300 Totalack (tin, copper), St. Just	91 5 0 ..	..	477 15 0 .. 0 0 0 - May	1864		
1800 Brixham Hematite Iron [L. £8]	6 7 0 ..	..	0 0 0 .. 0 6 0 - Nov.	1864		
1500 Bronfloyd (lead), Cardigan [L. £18]	12 0 0 ..	..	25	6 5 0 .. 0 15 0 - April	1865	
1300 Bryn Gwyn (lead), Mold [L.]	9 0 0 ..	..	—	— 2 10 0 - Mar.	1865	
915 Cargill (silver-lead), Newlyn	15 5 7 ..	32	10 0 0 .. 0 10 0 - Mar.	1865		
1400 Carn Bras (copper, tin), Illogan	15 0 0 ..	..	280 10 0 .. 0 0 0 - June	1864		
2880 Clifford Amalgamated (cop.), Gwern	30 0 0 ..	30	24 16 0 .. 0 12 6 - April	1865		
3000 Copper Miners of England	25 0 0 ..	..	75 per cent.	— Half-yearly	1865	
4000 Ditto	Ditto (stock)	100 0 0 ..	..	1 percent.	Half-yearly	
867 Gwyn Erddin (lead), Cardiganshire [L.]	7 10 0 ..	..	15 18 0 .. 1 0 0 - Mar.	1865		
128 Gwynywstwith (lead), Cardiganshire	60 0 0 ..	..	285 10 0 .. 0 4 0 - April	1865		
280 Derwent Mines (all-lead), Durham	300 0 0 ..	..	152 0 0 .. 0 0 0 - June	1864		
1024 Devon Gt. Con. (cop.), Tavistock [S.E.]	1 0 0 ..	..	952 0 0 .. 0 0 0 - Mar.	1865		
555 Dolcoath (copper, tin), Camborne	128 17 0 ..	19	791 10 0 .. 0 5 0 - April	1865		
512 East Bassett (lead), Redruth [S.E.]	29 10 0 ..	19	128 0 0 .. 1 0 0 - Nov.	1864		
6144 East Cardon (copper), St. Cleer [S.E.]	2 14 0 ..	14	135 18 0 .. 0 18 0 - April	1865		
300 East Darren (lead), Cardiganshire	32 0 0 ..	..	165 10 0 .. 0 2 0 - April	1865		
128 East Pool (tin, copper), Pool, Illogan	24 5 0 ..	..	369 10 0 .. 4 0 0 - June	1864		
5000 East Rosewarne (cop., tin), Gwennap	2 15 0 ..	2 1/2	0 4 6 0 .. 0 2 0 - Feb.	1865		
2800 Foxdale (lead) Isle of Man [L.]	25 0 0 ..	28	67 0 0 .. 1 0 0 - May	1865		
5000 Frank Mills (lead), Christow	3 18 0 ..	8	3 7 6 0 .. 0 7 0 - May	1865		
5 00 Great Laxey (lead), Isle of Man [L.]	4 0 0 ..	19 1/2	2 1 0 0 .. 0 10 0 - Mar.	1865		
5000 Great W.B. Vor (tin, sp.), Helston [S.E.]	40 0 0 ..	31 1/2	6 2 0 0 .. 0 15 0 - Mar.	1865		
119 Great Work (tin), Germoe	100 0 0 ..	..	15 0 0 .. 0 5 0 - Aug.	1864		
1024 Herodotus (d.), near Liskeard [S.E.]	8 10 0 ..	..	31 10 0 .. 1 12 0 - Feb.	1865		
4500 Liscorrie (lead), Cardiganshire, Wales	18 15 0 ..	..	433 10 0 .. 3 0 0 - April	1865		
2000 Mass-y-Safn (lead) [L.]	20 0 0 ..	..	1 0 0 .. 1 0 0 - Oct.	1864		
5000 Marks Valley (copper), Caradon	4 10 0 ..	5 1/2	3 0 6 0 .. 2 0 0 - April	1865		
3000 Miners Boundary (lead), Wrexham [L.]	1 0 0 ..	..	0 6 0 .. 0 2 0 - Mar.	1865		
1800 Miners Mining Co. [L.] (d.), Wrexham	25 0 0 ..	..	169 18 0 .. 7 0 - Feb.	1864		
2000 Mining Co. of Ireland (cop., lead, coal)	7 0 0 ..	..	19 2 10 0 .. 1 0 1 - Jan.	1865		
4000 Mwyndy (iron ore) [L. £2] [S.E.]	3 18 0 ..	..	0 4 0 0 .. 2 0 - April	1864		
280 Nanty Mines (lead), Montgomery	20 0 0 ..	..	7 0 0 .. 1 0 0 - June	1864		
6000 New Birch Tor and Vitter Cons. (tin)	1 6 8 ..	..	0 11 0 .. 0 1 0 - Oct.	1864		
5926 North Treskerby (copper), St. Agnes	1 9 0 ..	3 1/2	18 0 0 .. 2 0 0 - Feb.	1864		
305 Parys Mines (copper), Anglesey [L.]	50 0 0 ..	..	142 10 0 .. 7 0 0 - April	1865		
1123 Providence (tin), Uny Lelant [S.E.]	10 6 7 ..	32	76 5 0 .. 1 0 0 - Feb.	1865		
30 Silver Kite Mining Company	280 0 0 ..	..	— 2 0 0 - Dec.	1864		
612 South Cardon (cop.), St. Cleer [S.E.]	1 5 0 ..	..	510 520	475 10 0 .. 8 0 0 - Mar.	1865	
4000 St. Day United (tin), Redruth	14 0 0 ..	..	0 5 0 0 .. 0 5 0 - Mar.	1865		
940 St. Ives Consols (tin), St. Ives	8 0 0 ..	..	490 10 0 .. 0 10 0 - May	1864		
6100 Tincroft (cop.), Pool, Illogan [S.E.]	9 0 0 ..	17 1/2	16 11 0 .. 0 10 0 - Mar.	1865		
6000 West Bassett (copper), Illogan [S.E.]	1 10 0 ..	..	26 9 0 0 .. 0 6 0 - Mar.	1865		
8000 W. Chiverton (d.), Perranzabuloe [S.E.]	..	62 1/2	4 10 0 .. 0 15 0 - Feb.	1865		
246 West Damself (copper), W. Chiverton	..	88 0 ..	53 10 0 .. 1 0 0 - Nov.	1864		
20000 West Wheal Lovell (tin), Wendron	12 6 0 ..	13	0 17 6 0 .. 0 2 0 - Jan.	1863		
1000 West Wheal Lovell (tin), Wendron	9 0 0 ..	13 1/2	1 10 0 0 .. 0 10 0 - May	1864		
845 Fowey Consols (copper), Tywardreath	4 7 0 ..	..	41 9 3 0 .. 0 2 0 - June	1860		
6000 Great South Tolgus (copper), Redruth	0 14 6 ..	2	2 2 2 4	7 18 6 0 .. 0 5 0 - Dec.	1861	
10240 Gunnislake (Gelters' Adl.) (copper)	0 2 0 ..	..	0 3 0 0 .. 0 1 0 - Mar.	1862		
140 Levant (copper, tin), St. Just	2 10 0 ..	..	1091 0 .. 0 5 0 - May	1860		
440 Mount Pleasant (lead), Mold	4 0 0 ..	..	18 18 1 .. 0 7 0 - Aug.	1862		
5000 Orsas (lead), Flintshire	0 0 0 ..	..	0 10 4 0 .. 0 5 0 - Mar.	1862		
4000 Par Consols (cop.), St. Blazey [S.E.]	1 2 8 ..	..	36 19 0 .. 0 2 0 - Mar.	1862		
1773 Polkerr (tin), St. Agnes	15 2 8 ..	..	7 19 6 0 .. 0 10 0 - Nov.	1861		
513 Polbrean (tin), St. Agnes	8 0 0 ..	..	1 0 0 .. 0 2 0 - July	1861		
6000 Rosewall Hill (lead), Redruth	3 1 0 ..	..	0 10 0 0 .. 0 1 0 - June	1863		
512 South Tolgus (lead), Redruth	8 0 0 ..	18	74 10 0 .. 1 0 0 - May	1863		
496 S. Wh. French (cop.), Illogan [S.E.]	18 18 9 ..	20	18 20 0 .. 1 0 0 - Nov.	1863		
280 Spanish Moor (tin, copper), St. Just	32 17 9 ..	..	9 15 0 .. 0 1 0 - June	1862		
572 Trevyton Consols (tin), St. Ives	14 10 0 ..	..	7 0 0 .. 0 10 0 - Sept.	1860		
1000 Trumpet Consols (tin), near Illogan	11 10 0 ..	..	11 0 0 .. 0 2 0 - Mar.	1862		
4300 Vigras and Clogau (cop.) [L. £2]	5 0 0 ..	..	20 22	6 2 6 .. 1 10 0 - Mar.	1864	
80 West Burton Gill (tin), Yorkshire	50 0 ..	..	14 10 0 .. 0 3 0 - June	1861		
1024 West Cardon (cop.), Liskeard [S.E.]	10 0 0 ..	10 1/2	101 1 8 .. 0 10 0 - Oct.	1862		
1024 West Beasett and Grylls (tin)	7 0 0 ..	7	3 0 0 .. 0 10 0 - Oct.	1863		
1024 West Kitey (tin), Uny Lelant [S.E.]	3 0 0 ..	..	10 2 6 .. 0 7 0 - July	1864		
596 West Wheel Margaret (tin, copper)	13 17 6 ..	5	76 5 0 .. 0 1 0 - May	1863		
2044 West Tremayne (tin), Gwinear	6 11 3 ..	3	6 1 3 .. 0 8 0 - Nov.	1863		
6400 West Fowey Consols (tin, copper)	7 10 0 ..	..	0 19 0 .. 0 3 0 - May	1862		
8000 Wharfaded Mining Company [L. 10s.]	0 5 6 ..	..	— 0 0 6 - Jan.	1864		

* Dividends paid every two months. † Dividends paid every three months.

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last paid
2400 Boscan (tin), St. Just	20 10 0 ..	..	36 10 0 .. 1 0 0 - Mar.	1862		
256 Condurrow (cop.), Camborne	76 10 0 ..	..	60 70 .. 0 0 0 - June	1857		
2450 Cook's Kitchen (copper), Illogan	18 5 0 ..	10	94 10 0 .. 1 0 0 - May	1862		
1024 Copper Hill (copper), Redruth	12 0 0 ..	10 15	7 2 6 .. 0 0 0 - Sept.	1862		
1024 Craddoch Moor (cop.), St. Cleer	8 0 0 ..	..	7 12 0 0 .. 0 4 0 - July	1862		
4076 Devon and Cornwall (cop.), Tavistock	6 0 0 ..	..	0 10 0 0 .. 0 2 0 - Feb.	1859		
12000 Drake Walls (tin), Calstock	1 0 0 ..	..	— 3% ..	0 18 0 0 .. 0 1 0 - May	1863	
2000 Drymen (lead), Wales	..	..	— 3% ..	0 18 0 0 .. 0 1 0 - May	1864	
1000 East Wheal Lowell (tin), Wendron	12 6 0 ..	13	0 17 6 0 .. 0 2 0 - June	1863		
1000 East Wheal Lowell (tin), Wendron	12 6 0 ..	13	0 17 6 0 .. 0 2 0 - June	1863		
1000 East Wheal Lowell (tin), Wendron	12 6 0 ..	13	0 17 6 0 .. 0 2 0 - June	1863		
1000 East Wheal Lowell (tin), Wendron	12 6 0 ..	13	0 17 6 0 .. 0 2 0			